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# The influence of television on the readiness and potential literacy of pre-school children.

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THE INFLUENCE OF TELEVISION ON THE READINESS  
AND POTENTIAL LITERACY OF PRE-SCHOOL CHILDREN

A Dissertation Presented

By

Colin F. MacKinnon

Submitted to the Graduate School of the  
University of Massachusetts in partial  
fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

February 1979

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ON THE READINESS AND POTENTIAL LITERACY  
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## ABSTRACT

### THE INFLUENCE OF TELEVISION ON THE READINESS AND POTENTIAL LITERACY OF PRE-SCHOOL CHILDREN

February 1979

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Methods of transmitting information to the public have changed in the past twenty-five years; the utility of reading and writing has also changed. The published decline of SAT scores, the difficulty of teaching reading and writing to young children, the concern about accountability in public schools, and the widespread impact of television viewing on our society provide subjective evidence of these changes.

The pre-school readiness scores of two hundred pre-school children from a rural community were compared to the number of hours of daily television viewing reported by parents during a pre-school interview as one means of establishing the relationship between television viewing and its possible influence on the reading readiness of pre-schoolers. The areas of readiness assessed were fine-motor, gross-motor, perceptual-motor, and personal-social domains. (The language development of the pre-schoolers was not addressed in this study.) Anecdotal evidence from the writer's experiences, field observation in a rural school, as well as curricular guidelines were offered against a background

description of an overview of literacy and growth of non-print media.

Although no significant effect of television viewing was established as a result of this study (Significance was determined by a score greater or less than one standard deviation from the mean in sub-test as well as total test scores), the depression of fine-motor, gross-motor, and personal-social scores among children viewing more than two hours of television daily was noted, as was the overall effect of television experiences on the readiness of those sampled.

The study concludes that the kinds of activity choices available in the homes of pre-schoolers can affect the child's readiness to read if the dominant activity is television viewing. There must be a balance between television viewing and skill building activities in the psychomotor domains. Even though the study shows that television does offer a slight benefit in the perceptual-motor area, it fails to provide readiness experiences in the other psychomotor areas.

The study recommends that parents and educators be more cautious about the demands which television makes on the time of pre-schoolers. Where possible, parents are encouraged to make conscious decisions about their children's discretionary time. Educators are encouraged to assess the affect



of the process of television viewing on the readiness of pre-school children.

# CHAPTER I

## INTRODUCTION

To suggest an end to literacy as we know it in the twentieth century is to challenge the purpose of public education in America--the teaching of reading and writing to all its citizens. That pessimistic suggestion foreshadows the following dissertation: The ability of the citizens of this democracy to read and write--to decode written and printed symbols and to express themselves in writing and print--may decline with the passage of time and with the changes in the technology of media and computers. Even though the beginnings of literacy as we know it thousands of years ago depended increasingly upon a printed, or otherwise graphically reproduceable notational system, we depend less and less upon such systems today because we have developed more popular alternatives, computers and electronic media.

The basis for this suggestion are observations from the field of public education made during my tenure as an elementary school principal. These observations and some of the data generated by them are included in the chapter on field observation.

The suggestion that literacy will decline comes at an unfortunate time. Not all of the western world enjoys the same level of literacy as Americans do, nor have all

countries achieved the standard of living enjoyed by us. Improved literacy seems to have contributed to the rise in the standard of living of modern emerging nations, though. A decline in levels of literacy in America should not threaten the standard of living, however. It may determine, to a much greater extent, the division between our classes of society and will adversely affect the upward mobility of lower classes which has been achieved in recent years in the United States.

Another important consequence of alphabetic culture relates to social stratification. In the protoliterate cultures<sup>1</sup> with their relatively difficult non-alphabetic writing systems, there existed a strong barrier between the writers and the non-writers; but although the 'democratic' scripts made it possible to break down this particular barrier, they led eventually to a vast proliferation of more or less tangible distractions based on what people had read. Achievement in handling the tools of reading and writing is obviously one of the most important axes of social differentiation in modern societies. . .<sup>2</sup>

The reasons for the growth of our standard of living forms the backdrop for this dissertation as an explanation of the sociology of literacy in a preliterate culture--one which existed after the fifth century B.C., and a post-literate culture-- one which exists after the development of electronic methods of recording and disseminating information. The study itself assumes the effect which literacy has had on the rise of democracy as well as the growth of the American public school. Specifically, however, this dissertation describes what it is to be literate and

suggests the deliterious affect which television has on pre-school children and their potential for literacy.

The most basic of the terms used in this thesis is literacy, a term which has taken on some interesting meanings in the latter half of the twentieth century. Literacy, historically, has been defined more by its effect than its process. The initial effect of literacy on the development of Western society is summed up by White:

It only took three or four thousand years to transform primitive tribal systems, activitated by human energy and subsisting upon wild foods, into great urban cultures sustained by the intensive cultivation of cereals. But with the achievement of the great urban, literate, metallurgical, calendrical cultures, the curve of cultural development leveled off. . .<sup>3</sup>

It is White who has suggested that "the symbol is the basic unit of all human behavior and civilization."<sup>4</sup> The effect of the development of literacy since tribal man developed language has been marked by progressive stages in the development of technology. It was the invention of the printing press in the mid-fifteenth century by Gutenberg which ushered in the industrial age--the age of exploration and colonization--and brought about the undiversalization of spoken language in the western world as well as the assurance that history would be recorded in print. The twentieth century has fostered the development of electronic means of recording and disseminating information, and this act has threatened the primacy of literacy. New terms like visual literacy abound. Unfortunately such terms are confused with the

meaning of literacy itself. To be literate is to be able to decode information which is reproduced in a visual notational system and to be able to encode ideas into a similar system. Phonetic literacy is the decoding and encoding of information into a phonetic notational system with alphabet and groups of graphemes which have been organized into a system of written or printed communication.

The interiorization of the technology of the phonetic alphabet translates man from the magical world of the ear to the neutral visual world.<sup>5</sup>

McLuhan's suggestion that phonetic literacy is a visual function is an important idea which explains, somewhat, some of the twentieth century confusion about literacy. As the aural and visual stimulæ have proliferated films and television, many students of the media presumed that each medium had its own language or specific notational system, without which a term like visual literacy would be impossible. Studies of television itself seem to suggest that it is "cinematic motion itself that is a prime factor accounting for the near universal behavior of television viewing in the United States,"<sup>6</sup> rather than visual language. The meaning derived from visual media, then, seems the result of physiological or psychological factors inherent in the viewing of the program itself rather than by "the reduction of uncertainty."<sup>7</sup> "Meaning depends on the relating of information to categories in a person's cognitive system."<sup>8</sup> To compare the act of viewing a television program and reading a book



is an important means of clarifying the meaning of literacy:

Television. . . communicates a high degree of visual specificity, as does the surface of the real world without mediation. It does not generalize. Although the medium selects, it does not abstract. Rather, it presents a flow, often discontinuous, of the surface of the world that is endless and unorganized. People and places are not 'explained' or 'understood' as is often the case in the older media. They are shown.<sup>9</sup>

Spoken and written language are generalizations and abstractions themselves which gain their meaning by the delicate balance between their appearance or recognition as raw symbols and the cognitive contexts in which the human brain processes them, in other words, the relationship between the idea of the speaker or writer and the understanding of the listener or reader. Vigotsky tells us that "meaning is an inalienable part of a word, as such, and thus belongs in the realm of language as much as in the realm of thought."<sup>10</sup> "A word acquires sense from the context in which it appears; in different contexts, it changes sense."<sup>11</sup> In a visual context, a word is merely an organized grouping of shapes which must be recognized and "assimilated into the active intellect."<sup>12</sup> A television image, a vicarious experience at best, presents similarities to reality which can be experienced by the smallest child. Its images are unreal in the sense that the television image is a two-dimensional pattern of 525 lines projected on a relatively small surface (slightly convex) where characters appear smaller than life-size, where the

passage of time is abbreviated, and where the viewer cannot participate in the action. The main attraction of visual media, especially television, seems to stem from physiological responses of the eye to rapid (at least one each four seconds) changes on the television screen itself.

If access to information itself is a natural human desire, then the responsiveness of an individual to a particular medium contributes to its utility and popularity as a ready source of information. As it takes some initiative to purchase a newspaper, to open a book, to read the directions enclosed within a package, it takes less initiative to turn on a television set, radio, or movie projector (especially the self-threaders). Thus, it is the activity of the user which suggests the relative activity or passivity of a medium. While McLuhan's "hot-cold" analogy can be somewhat confusing, his message is important: Reading is an active, participative process; viewing television and films is not. Literacy, too, can be defined in terms of the activity of the reader in the reading and writing process. It is the reader or writer who acts; the television or film viewer is acted upon. Perhaps visually responsive is a better term to measure the fluency of a user with the television or film. Further, to characterize young children who spend six or more of their waking hours each day in front of a television set as visually literate is a grave disservice--especially those who exhibit difficulty in

school as they try to learn to read and write. Similarly, to prescribe an educational program which depends upon visual media and teaching machines as gimmicks to attract children's attention is also a grave misunderstanding of their dysfunction.

The process of reading and writing, literacy, and the activity of watching television are dissimilar. Much confusion among educators seems to stem from the similarities in content rather than the effect of each medium on the active intellect of the child. "Man is a creature who devours information. He spends much of his waking time selecting and acquiring information--and a good part of the time he is asleep organizing it."<sup>13</sup> Most of the organization of such information occurs with specific language, not vague visual or aural images. Leslie White, a sociologist, says:

Everything comprising culture has been made possible by and is dependent upon the symbolic faculty: the knowledge, lore, and beliefs of man; his social systems; his institutions, political and economic; his rituals, paraphernalia, and forms of art; his traditional attitudes and sentiments; his code of ethics and etiquette and, finally, his technology.<sup>14</sup>

Television provides information but does little to enable the individual to understand it.

Implicit in this thesis, then, is the notion that literacy is a process which develops critical thinking and judgment in a way which no other media can. The proof of this assumption is beyond the scope of this thesis. It is



not my intention to qualify or quantify twentieth century culture, nor to compare it to other literate or non literate cultures for the purposes of establishing the value of critical thought and judgment. Brief references to early tribal cultures, having only oral means of communicating symbolically, may illuminate these issues somewhat because these cultures were pre-literate and pre-electronic. Similarly, evidence of the decline of literacy in the latter half of the twentieth century, ostensibly because of the indreased dependence in the society upon electronic information systems may imply the erosion of critical thought and judgment. I will depend on a practical rationale for reading and writing which is historical in nature and implicit as our means of reflecting upon and understanding our culture as well as conducting our daily affairs.

### The problem

In a recent discussion I had with a reading teacher in a small rural elementary school in New Hampshire, the motivation for students to learn to read and write came up. She asked what it was that made reading important for students in a middle school section (Grades 5-8). I suggested that she needed to provide much of the motivation. She felt that many of these pre-adolescent and adolescent youngsters express the belief that there is little practical value to learning to read. "It's boring", they say.

Teachers entice reluctant students with stories about college, getting a good job, appreciating literature and history, but most resistance to reading comes from other home and environmental influences. Some children seem to enjoy reading for pleasure as well as for acquiring information; others do not. Similarly and perhaps casually, some are from culturally advantaged homes; others are not.<sup>15</sup>

A parent asked me why it is so difficult to teach reading and writing today when a generation ago most students seemed to be more interested in the mastery of the skills. Without exploring the issues with her too deeply, I asked her whether her children phoned their grandparents on holidays or wrote to them. She smiled and offered no reply.

This parent's anxiety about the success of her children as readers reflects the concern which is evident, today, in public schools as well as schools of education: It is becoming increasingly more difficult to teach elementary children to read.<sup>16</sup> This difficulty is not the direct focus of this dissertation. It is, however, the primary symptom of a complex problem which is addressed by this study.

The notion that literacy may decline will concern the reading teacher, newspaper publisher, pulp writer and magazine journalist. Those people who are concerned about the value of knowledge, the importance of ideas, and the meaning of life in the twentieth century steadfastly defend the literary tradition and the value of universal literacy.<sup>17</sup>

At the opposite end of this philosophical spectrum some futurists would willingly abandon print to foster the mass implimentation of electronically mediated information in schools and in a "deschooled society". Neil Postman, one of the co-authors of Teaching As a Subversive Activity and Linguistics: A Revolution in Teaching, wrote an attack on literacy in a position paper titled "The Politics of Reading". In it he poses some challenging arguments:

The schooling process should prepare youth for a tranquil entry into our economy. . .Some minimal reading skill is necessary if you are to be a 'good citizen', but 'good citizen' means one who can follow the instructions of those who govern him. If you cannot read, you cannot be an obedient citizen. If you cannot read, you will be a relatively poor market.<sup>18</sup>

(Historically, the rise of literacy in developing nations has helped to prevent its citizens from being victimized and controlled out of ignorance.) "It is entirely possible that the main reason middle-class whites are so concerned to get lower class blacks to read is that blacks will remain relatively inaccessible to standary-brand beliefs unless and until they are minimally literate."<sup>19</sup>

While Postman's arguments question the political basis for the teaching of reading, he misses the point of literacy, in my estimation. While attacking the motives for the teaching of reading he seems to ignore one intrinsic benefit of reading, the development of critical thought and judgment. (A consumer is not, necessarily, a thinker.) It is the human

dependence upon a variety of printed symbols which can stimulate the development of knowledge, new ideas, and the means of making educated choices. The perceptive and cognitive tasks which must be accomplished while reading are the processes which lead to an appreciation of deeper meanings from the raw world of generalizations which graphic symbols provide. It is the human mind rather than the medium, itself, which accomplishes this task in reading.

Postman's reasons for criticizing reading are understandably expedient: electronic media are bombarding our senses, computers are helping to organize our lives. His argument, however, is self-limiting. His political sensibility seems to ignore the crucial issue of declining literacy by avoiding the human and social value of the processes which make up reading. Without these values themselves there is little rationale for reading and writing in the latter half of the twentieth century, nor can an educator or politician offer a cogent reason for the continued teaching of reading and writing.

Those in control of the curriculum--many of whom were in public schools in the forties, seem to justify the teaching of reading and writing dogmatically. Such dogma fortunately helps to maintain the status quo in this instance. Unfortunately, attacks like Postman's mobilize the more liberal elements of the society to abandon the traditional curriculum without taking the time to analyze the value of



its component processes. In the light of technology, reading seems grossly inefficient, but so does exercise compared with the technology of transportation.

In the early seventies alternative curriculum which stressed media awareness supplanted the teaching of "basics", the three Rs. In 1975 there seemed to be a backlash in many communities, and a return to the basics was demanded. An article in the December 8, 1975 issue of Newsweek magazine states:

The reading and writing skills of most Americans have never been remarkable, and the inability of the average high-school graduate to write three or four clear expository paragraphs has been the object of scornful criticism at least since the time of Mark Twain when only 7% of the population managed to earn high-school diplomas. What makes the new illiteracy so dismaying is precisely the fact that even the best educated young people seem to have fallen so far.<sup>20</sup>

This point of view is supported by the SAT report which firmly concludes "that less thoughtful and critical reading is now being demanded and done and that careful writing has apparently gone out of style. . . .We suspect strongly that expressing something clearly and correctly--especially in writing--is thinking's sternest discipline."<sup>21</sup> Even though many school systems have reaffirmed the value of Reading, 'Riting, and 'Rithmetic, children are still having difficulty learning to read and write, not because they are resisting being 'good citizens', or because they think they don't need to: Reading seems unnecessary. Postman hits the nail on the

head--again, for the wrong reasons--when he suggests that "the major effort of the schools would be to assist students in achieving what has been called 'multi-media literacy',"<sup>22</sup> --even though such a thing is a misnomer. Multi-media awareness might provide the student with information about the ways that media manipulates people, or the ways that our culture is determined by media; however, the political position of the schools of this country who promote either critical thinking or social consciousness seems subversive. Schools seem to have more of a responsibility to anaesthetize than to educate. At the very least, the principle function of the schools is integrative (Postman's point)--to prepare children for entrance into the society--rather than divisive. The school plays a critical role in the success of the processes it utilizes to educate. The dilemma is evident: If the outcome of the educational process is docile citizens, then the covert erosion of literate skills would be a function of educators. Yet, schools have been founded on sound principles of literacy; parents are demanding the teaching of basics. In a book titled Who Controls American Education, James Koerner suggests that the field of education is controlled by large political units in this society (NEA, Credentialing bodies like NCATE, The Office of Education in Washington, as well as the vendors of materials and supplies). The distinct lack of control of local administrations and constituents is evident, in his estimation. If this is true then a hypothesis which suggests that a massive

institution like commercial broadcasting has greater effect on the results of learning than local educators seems to be credible.

Greater and greater numbers of adults are utilizing reading and writing less for their basic acquisition of information (Circulation of the two leading news magazines is a mere 8 million copies weekly). These parents who read less may be passing their complacency on to their children. Reading a book is more time consuming than watching a television adaptation. The notion that information is transferred more effectively by mediating it electronically than with print is realistic in view of the popularity and saturation of radio and television receivers in this country. What some parents ignore is the relationship between the process of mediation and its effect on children. The home environment which they consciously (or unconsciously) provide--complete with electronic gadgets and devices (or an obvious lack of them)--ultimately may determine the quality of these influences on the child's development--especially in the pre-school years.

Fortunately, many teachers are concerned about literacy. The basic structure of the American educational system is print oriented. Children are expected to learn to read and write from the first grade. Success in school is still measured by each student's ability to understand the information printed in textbooks, on duplicated hand-outs, in

workbooks, and on blackboards and overhead transparencies. In higher education, it is the ability to have mastered the analysis and synthesis of written language which leads to terminal degrees. If the students in public schools are losing their ability to understand what is written as well as their facility at communicating their ideas in writing, then the basic fabric of education is, most certainly, under attack.

There is a curious irony to the suggestion that literacy may decline in this century: This treatise is the result of one of the highest forms of literate discipline in the modern world, the terminal academic degree. Its success should depend upon a fluency with written language. Access to such degree programs will certainly become more limited if fewer individuals develop literately--that is, if the requirements of such programs depend upon a specific level of understanding of reading and writing. Subsequently, contributions to the body of knowledge may narrow as some of the benefits of literacy: the acquisition of greater knowledge, the development of understanding and critical thought, and the search for deeper meanings become more limited.

The typical parent's question about the apparent difficulty of teaching reading today is hard for an educator to explain simply. One explanation is that the generation who went to school immediately after the second world war and those who grew up before them read and wrote because that was the primary



currency of information and entertainment. This propensity to be informed has been a fundamental principle of democracy. It has been the suitability of media to the demands of the public and the needs of a consumerist society which has determined its utility. Radio and television are well-suited to mass information; print is better suited to the public school. Mass media, especially television, has not succeeded on a large scale in situations where public financial support has been essential, as it has been in public education.

Parents seem the most confused about literacy. They complain that their children exhibit difficulty learning to read, yet they provide a home environment where each child (and adult too) can watch an average of more than six hours of television each day. (More time than each child spends in public school.) Parents complain to their boards of education that school has moved away from the basics yet fewer parents purchase books for their children to read or encourage them to use the public library. Ironically, fewer adults are seen reading by their children. Without adequate role models at home, children cannot be expected to discover the value of reading for themselves.

Children don't seem too concerned about literacy. Why should they be? Their basic language acquisition is aural. Even though the eyes enhance learning in the infant years, spoken language "symbolizes reality: we symbolize reality

in order to handle it. . . Language is our principle means of classifying, and it is this classifying function that goes furthest towards accounting for the role of language as the organizer of our representations of experience."<sup>23</sup> The psycholinguist, Frank Smith, suggests that basic language rules are learned by about age 3 1/2 and says that "spoken language is literally self-taught."<sup>24</sup> What a child hears, sees, and experiences builds on this natural language framework to determine what he understands about his words. These activities in the pre-school affect his ability to learn written language and to read once he enters public school.

A person can communicate without reading and writing; however, the teaching of literate skills is essential to an individual's survival in the modern world. "Widespread literacy may be necessary for large scale representative democracy to function easily, but it certainly does not necessarily produce democracy."<sup>25</sup>

As the methods of transmitting information to the public continue to change in the latter part of the twentieth century, the utility of reading and writing may change too. It might be that our future democracy will be more efficient and cost-effective if citizens are provided with the "proper" information but are stripped of their ability to test this information against some broader context (hence: to learn from it). The suppression of literate skills can and will prevent learning. A successful consumer must be informable as well

as informed. An informed public is not, necessarily, a knowledgeable one.

To suggest that children will stop reading and writing is unrealistic. As long as there are culturally advantaged homes, literate parents, books in print, and a class system in America, children will read and write. Unfortunately, though, the shrinking numbers of children who will become fully literate may accentuate further the class distinctions to a greater extent than today. If parents and children become more concerned about literacy than they are today, perhaps the mechanisms for slowing the inertia of media determination of society will develop better. Once social question, then, is how to inform children and parents about the deleterious effects of television. Another equally important question: is such information possible or practical today?

It seems that a large problem of literacy exists in America today. This particular dissertation will explore the issue as it effects a small rural community and its public school. These effects will be discussed in the light of the literature of the field of literacy (illiteracy), some facts about the nature of the television medium, and developing communication technology.

## C H A P T E R   I   I

### A BACKGROUND OF LITERACY

The sociologist's concern about literacy stems from the changes in our social organization which literacy and other modes of communication have caused. Tribal organization which predates the Greek city-state depended upon oral forms of communication. Custom regulated the manners of the tribe as successive generations "got the word" from their contemporaries. Information was controlled by tribal leaders by the strict use of rituals and rites. Spoken language formed the bond between tribesmen.

The transmission of the verbal elements of culture by oral means can be visualized as a long chain of interlocking conversations between members of the group. Thus all beliefs and values, all forms of knowledge, are communicated between individuals in face-to-face contact; and, as distinct from the material content of the cultural tradition, whether it be cave-paintings or hand axes, they are stored only in human memory.<sup>26</sup>

The ideas and customs of foreign tribes were alien; language systems differed. As travel and commerce throughout the mediterranean region improved, languages were interpreted, customs shared and new societies developed when conquest or trade brought them together. Progress was marked by the sharing of ideas between cultures--their communication--and by changes in the methods by which the new societies organized themselves. In all cases the two principle bonding agents were language--the natural tendency of human beings to "see reality



symbolically" (Sapir, 1961, pp. 14-15)--and religion, "a vast number of them (symbols) build the most typical and fundamental edifice of the human mind - religion" (Langer, 1960, pp. 42-43).<sup>27</sup> One basic principle in the organization of the early democratic societies was the relationship between information and control: In a democracy an informed public could be controlled.

The western countries were civilized by the same hands which subdues them. As soon as the barbarians were reconciled to obedience, their minds were opened to any new impressions of knowledge and politeness. The language of Virgil and Cicero, though with some inevitable mixture of corruption, was so universally adopted in Africa, Spain, Gaul, Britain, and Pannonia, that the faint traces of the Punic or Celtic idioms were preserved only in the mountains and among the peasants. Education and study insensibly inspired the natives of those countries with the sentiments of the Romans; and Italy gave fashions as well as laws to her Latin provincials.<sup>28</sup>

The growth of literacy from its origins in the Greek city state to the invention of the printing press by Gutenberg in the 15th century is chronicled by a number of changes in the rise of democracy, all of which depended upon the means of manipulating the public subtly. Control of information was in the hands of the governors.

...the ease of alphabetic reading and writing was probably an important consideration in the development of political democracy in Greece. . .Democracy as we know it, then, is from the beginning associated with widespread literacy; and so to a large extent is the notion of the world of knowledge as transcending political units. . .<sup>29</sup>

The shift in the development of early agrarian tribes to the mercantilism of the Phoenicians, to the rise of the

Guild system in Western Europe brought a dependence on the use of symbolic language systems which evolved into methods of recording information. As farmers bartered less and less, and as the craftsmen and tradesmen of medieval Europe developed an economic dependence upon each other, the reading and writing of written symbols became a necessary part of the culture. The interdependence between the needs of the changing socio-economic system and developing technology--the discovery of the stylus, development of the quill pen--is evident. Similarly, the invention of moveable type helped to determine the colonization of the new world, the industrial revolution and the spread of democracy in the Western World. From the fifth century B.C, to the fifteenth century A.D. the book was a scribal product. Only one third of the history of the book in the Western world has been typographic.<sup>30</sup> Even though the invention of the printing press provided the means of "delivering" printed information to every man, woman, and child, it must be remembered that the seeds of literate culture were sown centuries before. The key factor, too, in the relationship between literacy and democracy is the role of the individual in the society. In an oral culture, which was pre-literate, "The language is developed in intimate association with the experience of the community, and it is learned by the individual in face-to-face contact with the other members."<sup>31</sup> "But on the whole there is less individualization of personal experience in oral cultures."<sup>32</sup>

For writing, by objectifying words, and by making them and their meaning available for much more prolonged and intensive scrutiny than is possible orally, encourages private thought; the diary or the confession enables the individual to objectify his own experience, and gives him some check upon the transmutations of memory under the influence of subsequent events.<sup>33</sup>

A literate society, then, becomes quite different from a primarily oral one. As individuals develop the ability to choose their information from a recorded repertoire, they begin to exert an independence within the culture.

. . . in contrast to the homeostatic transmission of the cultural tradition among non-literate peoples, literate society leaves more to its members. . . and in-so-far as an individual participates in the literate, as distinct from the oral culture, such coherence as a person achieves is very largely the result of his personal selection. . .<sup>34</sup>

Jack Goody, from the University of Cambridge in England has conducted a number of inquiries into the sociology of literacy. With Ian Watt from Stanford University and a number of other scholars, he has investigated the implications of literacy on a number of societies in his Literacy in Traditional Societies. He makes an important contribution to the prophetic nature of this dissertation when he writes:

The contrast (between oral and literate cultures) could be extended for example, by bringing it up to date and considering later developments in communication, from the invention of printing and of the power press to that of radio, cinema and television. All these latter, it may be surmised, derive much of their effectiveness as agencies of social orientation from the fact that their media do not have the abstract and solitary quality of reading and writing, but on the contrary share something of the nature and the impact of the direct personal interaction which obtains in oral cultures. It may even be that these new modes of communicating sight and sound without any limit of time or place will lead to a new kind of culture: less inward and individualistic than literate

culture, probably, and sharing some of the relative homogeneity, though not the mutuality of oral society.<sup>35</sup>

Such speculation is certainly the thrust, too, of the messages which have been conveyed by Marshall McLuhan and his contemporaries who suggest that electronic media will turn the world into a gigantic tribe joined globally by communications networks.

It was the industrial revolution, finally, which illuminated the sociological consequences of literacy as we know it today. The development of mass-production and the changes in technology in less than 150 years would have been impossible without the effect of literacy on the culture. The growth of the American public school since the early nineteenth century and its goal of universal literacy affected the growth of technology.

The functional relationship between literacy and education has been mentioned briefly. The casual nature of this relationship is one suggestion of this thesis. One important outcome of the relationship is the parallel growth of industry and the American public school: "Until 1818 Boston had only public grammar schools, entrance to which required literacy, usually acquired in small, private, fee charging schools; this, of course, proved a burden on the poor."<sup>36</sup> As the industrial revolution took hold in America, social reformers sought to protect children from being swallowed by the growing labor force; liberal educators sought to improve the quality of children's lives; politicians stressed the production of capable and cooperative



school graduates:

Unlike traditional societies, with well-defined roles and social structures, societies that are modernizing require a commitment to competence. It is necessary to call forth and reward achievement if specialized and technical tasks are to be rewarded. The transition from a pre-industrial society requires a shift in the basis of social valuation from ascriptive to achievement. That became one function of public education, as schoolmen again attempted to facilitate economic change through the transformation of social attitudes.<sup>37</sup>

Marshall McLuhan has suggested that a direct relationship exists between the linearity of print and the technology of mass production. The assembly line mentality of modern man seems to suggest thought processes which are orderly and sequential. The tasks which comprise success in the reading act involve the perception of symbols reproduced on a page and arranged in a logical left to right, top to bottom sequence. Perhaps such efforts to tie reading and mass production together casually are far fetched; yet, the growth of technology and the rise of public education in America are parallel: As Americans became more literate, productivity increased. Further, the interdependence between literacy and the rise of technology has never been challenged. No information system, or language system has emerged which has posed a viable alternative. Even COBOL and FORTRAN and other computer languages fail to provide the universality of print. The value of literacy in the twentieth century pivots on this simple fact: No different or better notational system has been discovered.

The advent of mass electronic media is the first event

to begin to challenge the primacy of print as an information medium in the popular mind. It has yet to replace print as the universal currency of education. The fundamental goals of education which were set forth in the early 19th century still exist: "It is the desire that children become functionally literate and able to understand mathematics."<sup>38</sup>

Literacy has become such an important part of this society that few individuals or institutions could survive without it. It has been suggested that more material will be printed between now and the year 2000 than has been printed since the invention of the printing press. Further, fewer individuals will read this material: It will have been produced for the eyes and minds of a shrinking number of individuals. Another equally astonishing suggestion is the notion that our society possesses a mere 3% of the knowledge which it will acquire in the next 50 years. The understanding and assimilation of knowledge in the year 2028 presumes an information system which will be 30 times as efficient as those we have today, that is if literate skills remain constant.

The conditions in American society which spawned the public school and the rise of literacy and technology are an apt backdrop to the conditions in the latter half of the twentieth century. To speculate about the literate needs of future generations is one thing. To place the beginnings of the need to be literate and an appropriate definition of literacy into proper perspective is another. The former speculation is left

to the final chapter of this thesis. The latter context forms the substance of this chapter.

A survey of literature connected with the subject of literacy reveals fairly limited concerns. Dissertations and books which were published before 1968 have been catalogued under illiteracy and references to literacy, per se, have been cross referenced to illiteracy. A number of publications and pamphlets on the subject of illiteracy are available from UNESCO, the United Nations Educational, Scientific, and Cultural Organization. They reflect the concern and progress the group has made in studying and helping to eliminate much of the illiteracy which exists in the twentieth century in many foreign countries.

The term illiteracy has been replaced by the modern terms, functional competency and functional literacy. It has been the extensive investigation of levels of illiteracy in the United States in recent years which has led to the new terms.

The term functional competency resulted from the million dollar study conducted by the University of Texas at Austin by Professor Norvell Northcutt. Its results suggest that one adult in five in the United States is unable to read and write at a level which will enable him or her to survive without supervision or support from a more capable adult. This individual--there are some 40 million of them in the United States according to the survey--is unable to function at a survival-level in skills which require receptive and expressive commun-

ications skills as specified by a test in a number of actual life skills, e.g. "a task requiring respondents to match personal characteristics with job requirements."<sup>39</sup> The other thrust of the Northcutt study divided the population into three distinct groups by education and income. Northcutt concluded that education and income have a direct relationship with functional competency. His functional competency percentages--all of which were published in the popular press in the Fall of 1975--were for all segments of the population from school dropouts and welfare recipients to the college educated presidents of corporations. The Northcutt study is important to the development of literacy in modern America. Its "concern was not with the content of literacy, but with the skills involved."<sup>40</sup> Northcutt and his staff isolated four primary skills which account for the kinds of demands made of adults in a modern society.

1. Communication skills (reading, writing, speaking, listening)
2. Computational skills
3. Problem solving skills
4. Interpersonal relations skills<sup>41</sup>

These skills seem fairly traditional at first glance. The unique characteristic of the study is that Northcutt viewed literacy as a measure of an individual's ability to function within the context of a society. "A person is functionally competent only to the extent that he or she can meet the requirements which are extant at a given point in time. . . . Functional competence is a dynamic process, rather than a



static state."<sup>42</sup> If Northcutt's study is to be accepted as a primary definition of literacy then all notions of standards of literacy must be abandoned, a suggestion which is of particular significance to any educator. The difficulty with his term, functional competency, is that relative to American public education, it exists solely as an exit level goal for high school students, or perhaps as the result of a series of shorter-term behavioral objectives. Further, it seems to define skills rather than processes.

The move toward competency based education and levels of accountability will certainly accept definitions like Northcutts. At the moment, moves to improve levels of functional competency as well as assess it will necessitate the use of such definitions.<sup>43</sup>

Another term, functional literacy, connotes reading for a purpose.<sup>44</sup> "William Gray defines functional literacy as 'the ability to engage effectively in all reading activities normally expected of a literate adult in his community.'"<sup>45</sup> Modern definitions of literacy have risen from the Right to Read movement of the late 60's which mandated "the elimination of functional illiteracy among 90% of the population over 16 years of age."<sup>46</sup> Functional literacy presupposes a series of tasks which comprise survival skills: "These skills have been referred to as 'life skills, survival skills, coping skills' and so on."<sup>47</sup> In the past, much of the evaluative methodology was expressed in terms of grade level. Since most

assessments of literacy prior to 1950 in the United States were conducted with school-age children, most definitions, therefore, have been developed around notions of grade-level achievement. The newer terms do not express literacy in terms of grade-level achievement, a problem which will make the task of educating to meet these modern goals more difficult in my estimation. The scores of assessments of literacy which were conducted before 1950 are expressed in terms of the ability to read at the level of a sixth grader, a term which does not address the increasing problems of illiteracy among school children of all grades since 1950.

The McGraw Hill Publishing Company has designed a battery of school achievement tests which have sought to eliminate the stigma of grade-level. Their Comprehensive Test of Basic Skills, a norm-referenced achievement test, which can be administered with a second test, the Short Form Test of Academic Aptitude, an intelligence test, provides an instrument which compares each child with other children like him in age, sex, grade, two language categories, and two non-language categories. The results provide the parent and school system with a prediction of how the child should achieve when compared with this select norm group of kinds like him. The result is an aid to individualization in the school. It can, however, remove the notion of a national standard as a referent. Thus a

child's level of literacy can decline, as can the literacy levels of children like him, and the test will tell the parent and school that the child is achieving as we would expect him to achieve. The difficulty with the instrument is that it fails to build any accountability for the school system or society as a whole.

In an interesting study which was conducted at Columbia University in the period following the depression, Eli Ginzberg and Douglas Bray examined a large group of men who failed to qualify for the armed services in the period before and during the second world war. The study focused on the loss to society of men whose reading and writing skills were so inadequate that they were not eligible for military service. It revealed concentrations of illiterates in America in many rural farm areas as well as parts of the nation where school systems were inadequately developed. It also revealed that illiteracy rates among non-whites in the United States were more than five times those of whites. The importance of the study to this dissertation is in its concern for the demographics of literacy.

Statistics which reflect television viewing behavior correspond with those which reflect literacy as measured by the Ginzberg study. Television is viewed more hours by non-whites and by members of lower socio-economic groups than by whites of the middle and upper middle classes. The literacy rates which were published by Ginzberg show that non-whites and lower

socio-economic groups are less literate. The conclusion--which is consistent with research in education--is that those who would benefit most from being taught to be more literate are those who spend the greatest amount of time in front of a television set. The Northcutt study suggests an index of success which is a composite of 1) income, 2) level of education, and 3) occupational status.<sup>48</sup> "The assumption that competency is directly related to success implies that not only must the measure be derived from performances which are taken from the adult milieu, but that performance on such a measure must be positively correlated to success."<sup>49</sup> The Northcutt conclusions support the earlier work of Ginzberg and Bray.

In a book titled Literacy in Colonial New England, author Kenneth Lockridge traces the rise of literacy during the colonial period by using the signatures on wills as a means of assessing the degree of literacy during that period. Literacy rates above 70% were common in colonies like Virginia and New Jersey. As a contrast to the results of his study he cites literacy rates in France in 1690 as approximately 30% and traces their growth to 50% by the time of the French revolution. Increases in literacy, Lockridge feels, can be attributed to a number of factors: the rise of protestantism, increases in social mobility, or the possibility of cultural or social forces (which go undescribed). He concludes that in colonial New England local differences in migrant streams, the need for



better education, and differences in population concentrations contributed to the vast differences in literacy which he documented during this period. It is interesting to note that he does not address the issue of the improvement in print technology in his concerns for the growth of literacy in France between 1690 and the Revolution. His concern about the need for better education is one which has been taken up by most scholars of literacy.

Işenberg states that "illiteracy results largely from inadequate educational facilities or insufficient enforcement of compulsory school attendance laws."<sup>50</sup> His inquiry, conducted in 1964 stresses the need for proper schooling to promote literacy, a notion which is shared by most scholars of literacy. Those who concern themselves with world illiteracy view education as the single most important influence in wiping out world illiteracy.

Statistics which are most quoted about the levels of literacy in the United States are taken from the Census Bureau. "The Census Bureau considers literate anyone 14 years of age or older who has completed the sixth grade."<sup>51</sup> "The National Center for Health Statistics has conducted a survey using their Brief Test of Literacy, which shows that 4.8% of individuals 12-17 years old score below the average fourth grader on the instrument and therefore can be regarded as illiterate."<sup>52</sup> Most assessments of the levels of illiteracy in America range from an estimated 2% illiterate as reported in the census to

20% functionally incompetent as reported by the Norvell Northcutt of the Adult Performance Level Project. Comparison of these statistics is quite revealing and also symptomatic of the difficulty which scholars of literacy are having in arriving at some common definition of literacy (or illiteracy), at agreeing on the magnitude of the problem in the United States, and at arriving at some valid and consistent means of measuring literacy, functional literacy, or functional competency.

In 1870 the United States contained approximately 5.7 million persons who were classified as illiterate (by the census definition) which resulted in an illiteracy rate of 20 percent. Comparable data for 1950. shows a total of 2.5 million illiterates or approximately 2 percent.<sup>53</sup>

The above statistics, quoted from Ginzberg's book, The Uneducated, are followed by the statement "Illiteracy appears to be a residual problem"<sup>54</sup> Implicit in the statement is Ginzberg's conclusion that American public education had reduced the problem of illiteracy substantially enough to refer to the problem as residual.

An apt contrast to Ginzberg's study is a well-publicized Harris survey team report which was commissioned by the National Reading Center.

They asked respondents to read and fill in the appropriate information on five forms--Application for Public Assistance, Application for Medicaid, Application for a driver's license, personal identification form and a personal loan application. Using the criterion of 90% correct responses on these forms, Harris reports that 13 percent of their sample, or an estimated 18.5 million Americans, fell below

that level--that is, were marginally literate to functionally illiterate in terms of ability to perform these tasks.<sup>55</sup>

The Norvell Northcutt Adult Performance Project "determined that as many as 20 percent of the adult population are functionally incompetent."<sup>56</sup> Certainly comparison of these studies is like comparing apples and oranges. Such a comparison is not the issue in this case. What is important is the fact that concern about illiteracy in America has taken an interesting historical path: The improvement of public education seems to be cited as the single most important factor in the decline of illiteracy in the period from the colonization of America until the fifties. Since the fifties the methods of defining literacy have changed, as have the literate skills which seem to define functional competence in society. Further, efforts at enumerating the magnitude of illiteracy have shown that earlier criteria--based on a grade-level standard--seem inadequate. Thus both the demands of modern society as well as the need to better establish the complex issue of literacy itself have provided a new set of statistics as well as a new set of definitions. Although comparison of the period from 1640-1950 with the post Korean War era is not particularly meaningful in terms of definitions or the data base, something has happened to reading and writing in our culture.

This dissertation has set out to suggest that the something is a television. The survey of the literature has

revealed little or nothing which suggests any casual relationship between the increase of the saturation of television sets in America--which reached 90% in 1964 and has seemed to level off at 97% at the time of this writing--and the rates of functional illiteracy. What the survey does reveal is that up until 1950 most attention to literacy concerned itself with the following factors: Age, level of education, job, occupation, race, economic status, and regional location. These factors have not changed in today's studies. In fact, functional illiteracy continues to reflect a casual relationship with each of these factors. Ironically--and also, casually--these same factors reflect a similar relationship with the amounts of television--expressed in daily hours or accumulated hours by a certain age--watched by this variety of individuals.

One of the more important voids in the literature of literacy is the lack of concern for children. I can only surmise that most scholars have made assumptions about the improvement of public education in America and have concluded that the schools will take care of the children, or that the children are not of concern in discussions of illiteracy until they have failed in school or been failed by school. It is my earnest desire to suggest with this particular dissertation that this void is one of the more unfortunate oversights in the history of American education. It avoids the notion of early childhood education, avoids issues of pre-school readi-



ness, and, quite possibly has contributed directly to the increasing dependence in American education on perpetuating the learning disabilities myth (an issue which will be treated in the chapter on field observation).

The balance of the literature of literacy surveyed for this dissertation concerns remediation of illiteracy, or Adult Education. Projects have sprung-up all over the country which are aimed at improving the employability of illiterate--functionally incompetent--adults. The APL program, sponsored by the U.S. Office of Education is one such project which strives to provide minimum skills for employability in a variety of occupations. The LEARN Project, Literacy Education and Adult Reading for New Orleanians, Philadelphia's Operation Alphabet, Alabama's NDEA Grant are projects which are attempting to improve literacy--and employability--by using television as the instructional medium, and with great success. Adult Basic Education, Prison Programs, and the Manpower Development Training Act of 1962 have aimed their programs at the illiterate adult in society. The Job Corps, one of President Johnson's Great Society Programs, attempted to improve the literacy, employability, as well as self-image of culturally deprived, inner-city, disadvantaged youths. Even though many of these programs have come and gone in the past twenty years, because of shifts in priorities and changes in funding, their primary mission is the same: eradicate adult illiteracy in America. If the Norvell Northcutt study is any indication,



the situation seems to be getting worse instead of better. Perhaps it is time to focus attention on the public schools and on the effects of television on pre-school children.

I want to suggest that a great deal has happened to American public education since 1950. Further, I would like to imply that a parallel relationship exists between the adult illiteracy problem and the availability of the television medium in the home: that the failure of the schools in successfully developing basic skills is a direct consequence of the influence of television on children, teachers, and educational planners. I will provide some statistical evidence which relates pre-school readiness (a variety of psychomotor skills, cognitive skills, and social skills) to pre-school television viewing habits and patterns. I will extend some generalizations of these findings into a discussion of some of the issues which face educational planners in the future. Finally, I will indict the public broadcasters of this nation and demand their cooperation in establishing an awareness among the general public of the insipid dangers implied in the use of the television medium by the nations children, and will urge educators to strive to affirm the value of literacy in the perpetuation of the culture.

## C H A P T E R   I I I

### TELEVISION

Television is a part of our culture. It cannot readily be removed from it. The television set is the central focus of most American homes. So central is its focus, that many homes plan their lives around the television set. The average American watches more than six hours of television each day. The average American child watches television more hours than he spends in school. The influence of television on children and adults is immeasurable.

Television is our culture. Its messages determine our customs and habits, our consumer preferences, our likes and dislikes. TV personalities enter our lives as friends and relatives do. We sympathize and empathize with them all. As quickly, these same personalities disappear, just as products come and go. The entropy of television material is much the same as the planned obsolescence of the gadgets and objects of our society.

An industrial process based on advertising with a short-run emotional effect and the sale of fads and other short-lived merchandise requires at least a continual replenishment, and sometimes continuing growth, of new products and new ads for its survival. All the institutions in the process have a vested interest in keeping it running at accelerating rates, no matter what the product and no matter how artificial the advertising.<sup>57</sup>

Intensive research has been conducted into the relationship between television viewing and crime, (The Surgeon Gener-

al's 1.8 million dollar inquiry into television violence and its effect on the behavior of children) a concern for the effects of the content of television on young viewers, yet little attention has been paid to the long-term effect of the medium itself on all individuals, families, communities, or the society and culture for that matter.

The content of television programming ranges from programs of violence: Law and Order Programs (Columbo, Kojak, Streets of San Francisco, Police Story, Starsky & Hutch, etc.), The Lawyer Programs (Barnaby Jones, Kate McShane, Ironsides, etc.), The Situation Comedies (The Odd Couple, Sanford & Son, Laverne & Shirley, etc.), The Family Programs (The Waltons, Walt Disney, etc.), to News and Public Affairs Programs, Childrens Programming, Public Service Programs (Religious Programs telecast early or late on Sunday), to Live and Videotape Sports Programs and Network sustaining programs. Differences of opinion about the content of the majority of commercial television's fare stems from a concern about violence and sex and its portrayal to a youthful audience. One FCC regulation prohibits the programming of any but "family" programs before 9:00 p.m., the "bedtime" of our nation's children. The rule-makers presume that isolating violent content from the young viewers will alter the crime rate, or prevent them from exposure to and therefore concern with violence. I suggest that such legislation is myopic, although consistent with attempts by educators, legislators

and parents alike to shelter their children from the "evils" of our society. Ironically, it is many of the parents of these same children who assure the longevity of the more popular programs by watching them in the first place. (In Prime Time it usually takes a rating of 30--which is the percentage of the available viewing households at a given time--to assure the success of a particular program or series. There are approximately 70 million television homes in the United States.)<sup>58</sup>

You can read Time, Newsweek, and U.S. News, but you cannot watch each edition of the ABC, CBS, and NBS News. You may buy six rival cookbooks, but you must decide (this season at least, early 1975) between MacMillan and Wife, Kojak, and Masterpiece Theater. Hence the networks' mania for audience "share". Three networks yield, ideally, three-thirds of a total. Thirty-three percent, then, (or scattering a few points among PBS and non-network affiliates, 30 percent), is one's desirable share of the sets turned on at any given time. 35 is paradise, 25 is passable. 20 is near to failure. 15 and you probably won't be back next year. Reducing the scale but imitating the style, Public television crowds out loud every time it reaches 5.<sup>59</sup>

We cannot isolate the children from their parents, peers, teachers, or the effects of the rest of their environment. It is folly to assume that television's influence is more dominant than that of the peer or parent. Likewise, we cannot isolate the effects of television content or process from the overall development of our culture. After all, 97% of our nation's homes have one or more television sets, a statistic roughly matching that of indoor plumbing.<sup>60</sup> (Statistically, at least, it is no wonder that Newton Minnow referred to



television as a vaste "wasteland".)

Television is the explication of events, some of which are fictional, in an orderly, predictable, time frame. Conflict is resolved before the end of each program--a period of from one half to two hours usually. Most characters and settings are familiar to a large percentage of the audience because they have watched the programs each week for a season, year, or even decade. The vicarious events and experiences of television are superficial and transitory: They are unreal in the sense that the television image is a two-dimensional pattern of 525 lines on a relatively small surface where the characters appear smaller than life-size, the passage of time is abbreviated and the viewer cannot participate actively in the action.

Although television seems unreal, it is an experience that affects human learning and development, not to mention the culture or society. Yet we do not have any evidence that the content of television breeds violence or delinquency. We don't know whether constant exposure to the medium for five or six hours a day for ten to twenty years produces unfavorable changes in cognition or behavior. (We do know that pre-school viewing affects certain psychomotor behaviors, though - see chapter on field observations.)

"It does not seem likely that the mind and heart tutored by many years of television. . . is in the same circumstance as the mind and heart never exposed to television."<sup>61</sup> Al-



though there is insufficient research to make sound judgments about the effect of either content or process of the medium, critics, educators, legislators, and parents are compelled to explain the depraved conditions that exist in our society and have, understandably, pointed a finger at the twenty-five year old adolescent medium which stands ungainly but potently beguiling in their midst.

What has prevented thinking people from applying their critical faculties to this medium, which reaches greater masses than all the other mass media combined. . .? . . .scientific evidence suggests that thinking people--at least those over the age of twenty-five--are left brained in development. They rely on the left hemisphere which controls sequential, analytical tasks based on the use of propositional thought. TV, we are informed, appeals mainly to the right hemisphere of the brain, which controls appositional thought.<sup>62</sup>

Douglas Cater's interesting Ornsteinian explanation of the appeal of television suggests that television offers the brain comparisons, not dogma. Such comparisons, while food for cognitive development, comprise, to use Kenneth Boulding's term, a rigid transcript which wields tremendous political control over most of the people who watch television in this country. In his discussion of the creation of a value system in our society Boulding says, "The value system which places high value upon messages which conform to the tradition, that is, to the transcript, operates to select those messages which conform (emphasis mine) to the transcript and to reject those which contradict (emphasis mine) it."<sup>63</sup> In his discussion of the image of knowledge in life in society, he poses a partic-

ularly poignant argument that questions the assumptions of mass communication, comprehensive public education, and stratified organization, suggests that both the values of individuals as well as the facts that comprise their knowledge structure or "image" are formed in much the same way. That is: "the raw material of our image, both of fact and value, is messages."<sup>64</sup> He states further that "the messages consist of information in that they are structured experiences."<sup>65</sup>

The meaning of the message is the change which it produces in the image. "It is not the message that is important, but the transformation of the image which it produces."<sup>65</sup> (Or doesn't produce, as the case may be.) No wonder Marshall McLuhan entitled his book, The Medium is the Message. (It could as easily have been The Medium is the Massage, or Mass-age.) Each possibility suggests the important relationship between Boulding's concept of image formation and McLuhan's revolutionary notion that the media are the culture--extensions of ourselves. Notions of change, growth, and learning must account for both the form which information takes--the shape of content--the method of transmission and the processes of thought and understanding.

The history of communication documents the importance between the means of communication which has existed between individuals and the development of different cultures, and the meanings in the communication act. "The most significant

elements of any human culture are undoubtedly channelled through words, and reside in the particular range of meanings and attitudes which members of any society attach to their verbal meanings."<sup>67</sup> The early cultures passed on their customs and values verbally between tribe members. As phonetic literacy developed, the meanings of words extended within cultures and cross cultures. The development of modern languages reflects a "meaning explosion". The etymology of words, too, reflects the influences of a variety of traditions and cultural changes. It was the invention of print, however, which revolutionized the use of words.

"writing, by objectifying words, and by making them and their meaning available for much more prolonged and intensive scrutiny than is possible orally, encourages private thought; the diary or the confession enables the individual to objectify his own experience, and gives him some check on the transmutations of memory under the influences of subsequent events."<sup>68</sup>

Lev Semenovich Vygotsky treats the relationship between words and language in his book Thought and Language. He suggests that writing is "the most elaborate form of speech;"<sup>69</sup> and that "written speech is a separate linguistic function, differing from oral speech in both structure and mode of functioning."<sup>70</sup> The meaning of every word "is a generalization or concept"<sup>71</sup> and "meaning is a criterion of 'word', its indispensable component."<sup>72</sup>

The meaning of life in the twentieth century is one subject of literature: Robert Pirsig, the author of Zen and the

Art of Motorcycle Maintenance finds meaning in an old Triumph 650 motorcycle which his hero drives west from Minneapolis. To know your "bike" and to maintain it yourself forms, for Pirsig, a classical vision of meaning. Ken Kesey, author of One Flew Over the Cuckoo's Nest, gives meaning to his hero's existence by placing McMurphy's friendship for a group of chronic and acute mental patients in an Oregon hospital above his own freedom and impending destruction at the hands of "the establishment", the professionals who staff the hospital.

Webster's Third International Dictionary, published in 1966 defines meaning as "the thing one intends to convey by an act or especially by language: purport (do not mistake my meaning) or the thing which is conveyed or signified especially by language: the sense in which something (as a statement) is understood: import (what is its meaning to you) or the thing that is meant or intended." The meaning of the dictionary definition varies from person to person, however, I know what Kesey, Pirsig, and Webster mean. Mean, meaningful, meaning have provided some interesting interpretations as they have developed and changed as words. The dictionary definition of the word meaning connotes the transfer of information between two or more individuals who are utilizing a language; many possible meanings exists today: Life has meaning; music has meaning; riding a motorcycle has meaning; dancing has meaning; making love or refusing to make love has meaning.



Modern society has taken a broad range of symbolic activities and has invested them with meaning, all of which is transferrable in one direction only--from actor to observer. This transfer or one-way communication is said to be meaningful. To ask the observer, "what does it mean" rarely provides a satisfactory answer. The reason is that the symbolic action has no notational system and therefore cannot be easily communicated further. It is personal. This one-way flow of modern communication--especially that of the electronic media certainly contributes to the difficulty individuals in a modern society have with the search for meaning whether it be interpersonally, personally, or in the context of modes of communication, electronic, written, or otherwise performed.

One difficulty I have encountered in the teaching of literature to uninterested students at the Junior College level is that most are concerned with plot only. Perhaps because of reading difficulties, but more likely because of poorly developed perceptual skills (lack of experience with literature and written material) these students rarely seek meaning beyond the surface meaning in the assigned essay, short story, or novel. Although I cannot present statistical data, I will suggest, subjectively albeit, that part of the difficulty in the teaching of literature is that content becomes confused with meaning, a confusion of the dramatization of television which carefully weaves and interweaves the plot cinematically into an intricate structure which the educated, literate



viewer has little difficulty unravelling: The heroes and heroines are easily recognized, the sources of conflict and outcomes are predictable. The program has been produced to eliminate the need for symbol or imagery. Traditional literary devices are too recondite to be used by the television screen writer. Instead, a careful selection of production devices: Zooms, pans, cuts, dissolves, as well as dollies, trucks, etc. produce changes on the screen which hold the attention of the viewer:

Kolers (1972) postulates two separate channels in the human visual system for processing visual information: a human motion signal channel and a picture signal channel. The former operates analytically and the latter synthetically. The former appears to dominate, and take precedence over the latter. If this is correct, motion--both 'live action' and cinematic motion--may account for much of the near universal behavior of the television watching.<sup>73</sup>

Works of great literature, from the standpoint of content at least, rarely grace the airwaves of commercial broadcasting networks, until recently. The entire body of English and American Literature could provide enough program material for decades if it would fit the form of television; however, the form of the medium demands simplicity to be effective. The notion of the twelve-year-old mentality of the television is a necessity of television's form. The medium is well suited to the masses. As Rudolph Arnheim states: "What all intelligence tests measure is the ability to deal with symbols. The more intelligent a person is, the more complex and abstract these symbols can be."<sup>74</sup> In the same passage of his book

Visual Thinking Arnheim quotes David Reissman, speaking of the style of the deprived child:

1. Physical and visual rather than aural
2. Content-centered rather than form-centered
3. Externally oriented rather than introspective
4. Problem-centered rather than abstract-centered
5. Inductive rather than deductive
6. Spatial rather than temporal
7. Slow, careful, patient, persevering (in areas of importance) rather than quick, clever, facile, flexible.<sup>75</sup>

The list reads like a methodology to create a format for a television program, inferring that commercial television programming is mindless--created for the deprived. TV takes little responsibility for adopting changes in form or content either.

Access to printed information remains under the sole control of the individual reader, while the content of electronic information via radio, television, and telephone, is controlled by the electronic journalist and agencies of control like the Federal Communications Commission. Printed information can be sought at virtually any time of night or day. Electronic information fits into a rigid time schedule. Even though the receiver of such information is informed in advance about the subject of broadcasts and telecasts, he can exercise little control over the content or the time span over which it is received. The information flows in real time--to be experienced vicariously--without the benefit of repetition. Radio and television programs are designed to be viewed or heard once only. (Most made-for-television series are pro-

grammed for more than one broadcast for financial reasons; however, the programmer presumes that the second showing will still attract a large enough audience to justify the expenditure of advertising dollars in its support). Information which is instant and therefore temporary cannot be studied or reflected upon for too long a time unless it is recorded and replayed. The succession of specific visuals which flow from a television set provide facts, not concepts to its viewers. The revelation of the rhetoric of electronic media, the discovery of hidden or deep meaning in messages, the substance or theme of programs is well-hidden from view. Electronic media itself prevents the redundancy which print affords a reader.

The hierarchy of cognitive skills which have been proposed by Benjamin Bloom serves as one measure of the limited educational value of commercial broadcasting. According to his theories, thought processes like synthesis--the verbal or written expression of elements which have been learned--or criticism--a multi-leveled understanding of theme as well as plot--depend upon lower level skills like recognition of facts. Although Bloom's theory depends upon a multi-sensory, linear approach to information gathering, it presupposes the use of a phonetic notational system as well as a logical western progression of thought, or hierarchy. In an interview Marshall McLuhan had with Harley Parker and Robert Shafer, McLuhan said: "I wonder whether the rebellion of

children today in classrooms and against the book has anything to do with the new electronic age we live in?"<sup>76</sup> Shafer replied: "I would think that the break-up of the grid system in the classrooms may be leading to the break-up of uniformity in other aspects of the society as we move along to different kinds of patterns. The whole progressive education movement, we might say, was a kind of rebellion against linearity and grid structure."<sup>77</sup> McLuhan talks a great deal about his notion of mosaic. He means that information bombards the senses like the small chips of a mosaic to provide a total image rather than a slow, progressive, linear--assembly line--logical impression. The difference, specifically, is a difference in the way people thought at the beginning of the industrial revolution and the impact which electronic communication may have on the way they think today.

Television provides specific information rather than abstractions. The video portion of the television signal is smaller than life-size, two dimensional life-like image which is reproduced as 525 lines on a slightly convex surface. "It communicates a high degree of visual specificity."<sup>78</sup> Thus a consciousness of the surfaces of issues on television results from the specificity of its visual and audio as well as the inability of the short-term memory of the brain to retain much more than a limited amount of information at any instant.

There is much less information in short-term memory than in sensory store, in fact it can hold only about four separate items, and this information is lost



unless it is constantly renewed by some form of internal rehearsal. Because its capacity is very limited, short-term memory is disrupted if new information comes in before the information it contains has been disposed of. . . its duration is a few seconds at most.<sup>79</sup>

The flow of information from television programs moves along like many of the gags and jokes, directly to the punchline without the added richness and precision of written language. The subtle differences of diction, figures of speech, poetic cadences and rhythms, are anathema to television. Without the generality of the written notational system, without the redundancy of print, without the richness of written language, television provides a much more limited resource for the higher cognitive processes. The fact that an individual cannot interact with the medium seriously precludes its value as a tool in the more literate learning processes.

The inertia of the changes in the technology of communication suggests the difficult coexistence of print and electronics. The necessity for writing things down will decrease in our lifetimes as an increasing share of the responsibility for accountability is shifted from the individual to a machine--as the thinking and figuring for large groups of people is taken over by complex banking and merchandising systems which will depend, increasingly, upon electronics.

In the long run, the more powerful substitute for print will be the routine storage of information in computers or in the extreme reduction of printed matter and motion pictures into near-microscopic film that can be retrieved and projected on a screen.<sup>80</sup>



Ben Bagdakian is a staunch supporter of print who insists that print is with us to stay:

...the rise of new electronic media will undoubtedly reduce the ratio of printed to non-printed information, presenting more images without documents.<sup>81</sup>

He documents the rise of non-print technology--electronic media and the cybernetic technologies in a book, The Information Machines, which deals, basically, with newspaper journalism and, understandably, serves those ends. He says:

the assertion that 'the tyranny of print' is ended and that sentences and paragraphs will be displaced almost entirely by nonverbal forms has no basis in present trends or in appreciation of how men think and learn. A permanent record will always be wanted, to permit comparisons with past and present, and to let different individuals interpret for themselves society-wide laws, warnings, instructions, accounting, and speedy comparisons of a wide variety of data. Record keeping, diaries, bookkeeping, mathematics, chronologies, and histories may be adaptable in part to nonverbal images, but for most of them words are quicker and more efficient.<sup>82</sup>

The sole difficulty I have with this opinion is that the tremendous amount of political control which is exerted on the individuals of this nation by media's image makers can provide the kind of inertia necessary to preclude "comparisons with past and present". Left in the hands of big businessmen, the entire record keeping process may change purely in the interests of what is profitable. If it will be less expensive, and therefore profitable in the future to reduce all hard copy into microdots which are compatible with an IBM or Xerox produced machine, then that is probably what will happen. If the access to such machines--for reasons of cost

mainly--is limited to a narrow segment of the population, then individuals will not necessarily be able to interpret for themselves. Certainly the lure of television has threatened the public library in this country. Individuals do not necessarily seek information; it usually is delivered to them. Whether the future delivery system will be cost-effective enough to provide a terminal in each home is one question. The other is whether individuals will either want it or use it at all. These questions do not seem to be addressed by Bagdakian.

One criticism of commercial broadcasting points to issues of its controllers, a small minority of the population exerting their influence over the majority.

"Television is the greatest instrument the educated class have ever had to parade its wares before the people. On television that class has no rival. Fewer than 10% of the American people has completed four years of college. That ten percent virtually dominates television"<sup>83</sup>

The control of the medium rests in the hands and pocketbooks of educated, literate individuals, while its consumership rests with a population who seem to be losing their literacy.

There seems to be a need for this society to perpetuate a small, elite, ruling class of literate individuals who provide the medium of social control that assures the decline of literacy by anaesthetizing--in Huxley's soma fashion--the majority of people in the society.

It is neither the violence of the law and order programs nor the starkness of the evening news programs nor the innocuous quality of Gillette Foamy commercials which chronicles the importance of TV in the latter half of the twentieth century. It is more than two-hundred million individuals who are satisfied with their choice of passively receiving edited information rather than actively seeking knowledge which makes the stark difference in the decline of literacy as we know it. What can possibly change this trend?

"In this comparison of reading and television experiences a picture begins to emerge that quite confirms the commonly held notion that reading is somehow better than television viewing. Reading involves a complex form of mental activity, of imagination and inner visualization. The flexibility of its pace lends itself to a better and deeper comprehension of the material communicated. Reading engrosses but does not hypnotize or seduce the reader from his human responsibilities. Reading is a two way process: the reader can also write; television viewing is a one way street: The viewer cannot create television images. And books are ever available, ever controllable. Television controls.<sup>84</sup>

The values which Marie Winn describes in her book The Plug in Drug are those which must be established to understand the influence of television upon the growing child and its effect on the potential for literacy. There are a lot of popular ideas about television; however, few are established as fact. Actual research into the effects of the television medium upon our culture is limited. There have been three main research histories since the beginnings of popular commercial television:

1. "Imitation of Film Mediated Agressive Models" by Bandura, Ross and Ross in the Journal of Abnormal Psychology, 1963  
  
"The Effects of Film Violence on Inhibitions Against Subsequent Agression" in the Journal of Abnormal Psychology, 1963  
  
Television in the Lives of Our Children by Wilbur Schramm, J. Lyle, and E.B. Parker, 1961
2. The Surgeon General's Report: Television and Social Behavior
3. Research and development by the Children's Television Workshop.<sup>75</sup>

Most of this research has been connected with the possible casual link between television violence and aggressive behavior, which reflects the mentality of society's concern about television. The results of the inquiry of these psychologists, sociologists, physicians and politicians, and educators are inconclusive at best, but do serve as an index of what television is and what it, possibly, is not.

Television is not a language system. It depends to a large extent upon oral and written communication in its organization, planning, and execution. Contrary to popular belief, programs could not be produced without the benefit of staffs of well educated, literate writers. Similarly, the producers and production crews depend on such scripts and pre-production information to complete programs just as technical control room personnel depend upon a written daily "log" to organize and execute the broadcast day.

Television is, however, an entertainment medium, perhaps



the best in modern history , if only because of the vast numbers of people who use it daily. The medium grows because it meets some basic human needs: "Television is of most help as a source of knowledge to young children. We believe, therefore, that children get a faster start in learning of the world around them, but that gain is temporary only."<sup>86</sup> Television's success, however, "as a fantasy medium may conflict with its utility as a conveyor of information. . . Children do not go to television to learn. They more often go to television to escape boredom or forget their problems."<sup>87</sup>

Television is first, and always predominantly, a magic doorway into a world of fantasy, glamor, and excitement. It is an invitation to relax, to disregard one's real-life problems, to surrender oneself to the charming and handsome people, the absorbing events, that flicker on the picture tube.<sup>88</sup>

The problem which television poses for the child is that he has difficulty discriminating between his fantasy needs and reality needs. It is the reality needs themselves which involve the development of the intellect of the child. "When the usefulness of reality seeking is learned, children are more likely to seek material in print than on television."<sup>89</sup>

Another popular misconception about television is held by parents:

Television is seen as both an educational, enlightening influence and a habit forming source of nightmares. The responses of the group (responding to Surgeon General's survey team) indicate the prevalence of a concept of television as a learning



experience even though virtually none of the programs that children watch could be called educational in any formal sense.<sup>90</sup>

There seem to be a number of popular theories about brain dominance to explain the appeal of television.

"Until quite recently the question of whether any experience at all is capable of producing actual changes within the brain was a subject of controversy and speculation. . .As a result of recent experiments. . .there can no longer be any doubt that many aspects of brain anatomy and chemistry are changed by stimulation."<sup>91</sup>

There are aspects of brain development that may be significantly affected by regular exposure to the television experience, though they can't be measured by means of a simple IQ Test.<sup>92</sup>

There is a gross misconception among many cognitive theorists and even some respectable brain scientists of the definitions and implications of sequential thinking and simultaneous thinking. There is no part of brain operation--conscious or unconscious--which is not sequential in nature. The very physiology of the brain dictates sequentiality--one cell fires, the signal goes through a synapse, then on to another cell (or the signal is inhibited at the synapse, thus ending everything. The phenomena is like dominoes falling. Those who advocate simultaneous thinking in brain function as an alternative or preferred state of consciousness are unwittingly recommending the state of epilepsy. . .<sup>93</sup>

Rather than subscribe to the popular theories of brain dominance, it seems more adequate in this discussion to accept the fact that all mediated experiences have an effect on the development of the brain.

Educators themselves have probably put too much stock in the educational value of television. Even though there

is a substantial difference between commercial television and ITV, instructional television, their effect on the reality needs of children are similar. Television's educational value is incidental. . . "Little of the information learned from television comes from seeking. Much of it is incidental learning, usually gained as the by product of fantasy materials."<sup>94</sup> Instructional television does have some practical value as one medium among many that provides a resource for the educator.

"it is up to teachers to learn to make judgments about what media are more appropriate for a given subject matter, a given curriculum objective, a given student, a given time and place. Beyond this, teachers must give students a wide range of experience with a variety of media so that students can arrive at their own judgments."<sup>95</sup>

Television is not a panacea which will mysteriously launch the young learner into the twenty-first century. Television has its limitations as do all media. It must be chosen with care in the situations where its purpose doesn't conflict with more necessary processes.

It may be that a predisposition toward concentration, acquired, perhaps, through one's reading experiences, makes one an inadequate television watcher. But it seems far more likely that the reverse situation obtains: that a predisposition toward "openness" (which may be understood to mean the opposite of focal concentration), acquired through years and years of television viewing, has influenced, adversely, viewer's ability to concentrate, to read, to write clearly--in short to demonstrate any of the verbal skills a literate society requires.<sup>96</sup>

It is quite possible as Marie Winn's speculation suggests,

that the preponderance of one medium over another may prejudice or compromise one's skill in that medium. According to David Olsen, "intelligence is developed through mastering a cultural medium, a development that is more exclusively human, and is therefore considered to involve higher level mental activity. Intelligence is skill in a medium, or, more precisely, skill in a cultural medium."<sup>97</sup> In our culture we measure intelligence in terms of the development of the language of the culture. (Olsen may be alluding to skill in a medium like television here. It is necessary, therefore, to try to establish the value of the particular medium to the growth of the culture itself.) He states:

We tend to confuse skill in the medium which happens to be ascendent in our culture with a presumed universal structure of intelligence. . .the various media involved in different cultures can be expected to radically alter the information members of the culture select from the perceptual world. . .If we construe intelligence as a skill in a medium, we are skilled in some. . .We are, however, skilled in media that make an advanced technology possible.<sup>98</sup>

The media of this society are deterministic. As McLuhan has stated, "The medium is the message." The current dilemma about the relationship between language and thought further complicates a clear understanding of the word media to begin with. If modern notions of visual literacy are to be considered, then media without a specific notational system can be considered viable vehicles for cognitive growth. The accepted casual relationship between language and thought

which has been clearly documented by Whorff, Sapir, Hayakawa, and Vigotsky seriously limits the kinds of media which will stimulate the growth of language, as well as the development of critical thinking and judgment. Media which are not linguistic preclude the universal transmission of ideas. Arnheim, one proponent of the visual thinking school has said, "language is widely assumed to be a much better vehicle of thought than other shapes or sounds. Edward Sapir says, 'Thought may be a natural domain apart from the artificial one of speech, but speech would seem to be the only road we know that leads to it.'"<sup>99</sup> Vigotsky has argued, "that logical thought and systematic, hierarchical organized conceptual systems developed because of and through the learning of 'scientific concepts' which were the formal subject matter of the schools. The highest form of thought, verbal thought, was internalized speech which proceeded on the basis of pure meanings of words. Hence, systematic organized thought was verbally regulated."<sup>100</sup>

The development of a child's perception is not spontaneous; it takes place under the influence of practice and learning in the course of which the child assimilates social sensory experience and



joins the sensory culture created by mankind. The adults give the child methods of learning the environment by acquainting him with the systems of musical sounds--speech phonemes, geometrical forms, etc.--that have been developed by man. They also teach him to designate the particulars of his environment, by means of language. As a result, the child assimilates a certain system of generally accepted sensory measures, sensory standards that he uses later in his perceptive activity to analyze the reality and reflect it in synthetic images.<sup>101</sup>

Such analysis and reflection demands the exposure of children to cultural media which will assure relevant growth. Television is a poor choice by parents as well as educators:

The young child has a built-in need for mental activity. He is a learning machine, an "absorbant mind", a glutton for experience. In a culture that depends upon precise and effective use of spoken and written language, his optimal development requires not merely adequate, but abundant opportunities to manipulate, to learn, to synthesize experience. It is his parents, fatigued by his incessant demands for learning in the broadest sense of the word (learning that may involve whining, screaming, throwing things, pestering) who require the relaxation afforded by setting him before the television screen and causing him to become, once again, the passive captive of his own sensations he was when non-verbal thought was his only means of learning.<sup>102</sup>

Olsen feels that "the demands imposed on the child by both the physical and cultural environment in terms of the differentiation and organization of objects and events determine the structure and elaboration of the child's relevant conceptual systems."<sup>103</sup> Thus if children are left to their own interests and instincts, they will, invariably be drawn to television and held in its spell.

The greater the child's verbal opportunities, the greater the likelihood that his language will grow in complexity and his rational verbal thinking



abilities will sharpen. The fewer his opportunities, the greater the likelihood that certain linguistic areas will remain underdeveloped or undeveloped as critical time periods come and go."104 .

We know that as children develop they express certain needs and demonstrate a variety of skills. Such processes are clearly documented by developmental psychologists, just as the skills essential for learning to read have been documented. Careful exposure of children by parents first, and educators later to appropriate developmental stimulæ can assure that the growth process will assist the child in taking advantage of the benefits of the culture. Conversely, the blind, and sometimes random contact of children with inappropriate stimulæ may be harmful. The unfortunate part of this particular discussion is that we still know so little about the ultimate effect on the child of such influences.

Piaget argues from numerous experiments that cognitive growth is most likely to occur when children are presented with conditions that create cognitive conflict in them. In other words, children must be able to partially understand an experience. This partial understanding creates conflict, and the effort to resolve it induces cognitive growth. . . . In its early stages children's thought is characterized by a failure to recognize contradiction and conflict, especially in events that do not involve consequences affecting ongoing activities with objects and people. Events occurring on the television screen do not, in general, affect a child's ongoing activities among objects and people. Consequently, television is weakest in the exact spot where children need the most help"105

Marie Winn has said: "a number of studies of children's actual comprehension of television material find that while children clearly enjoy watching particular programs intended for their

age groups, and are thoroughly attentive when they watch, their understanding of what is actually happening on the screen is very small indeed."<sup>106</sup>

As Olsen states:

Language can be used to indicate to a comprehending listener what the alternatives are that he is likely to have to deal with, as well as how to choose between these alternatives. Language presumably does this by means of directing one's attention to those choice points and to the critical features of an event which permits the choice between these alternatives. In so doing one reduces enormously the amount of information a child may have to deal with in order to arrive on his own at a knowledge of those alternatives and the features that permit choice between them.<sup>107</sup>

"Television images do not go through a complex symbolic transformation. The mind does not have to decode and manipulate during the television experience."<sup>108</sup> What television offers is specific and transitory. It is complete and leaves little or nothing to the imagination. Schramm says:

Another quality of television which may make learning harder is paradoxically, the very concreteness of the audio-visual mode of instruction. The higher level of abstraction in the print media may be more successful in forcing attention to the abstractions and generalizations which increase learning and retention and which aid the application of what is learned to new situations (conceptualizing). The specificity and real-seeming nature of television may, by its very detailed audio-visual presentation, distract the viewer from such abstraction.<sup>109</sup>

The potential of television to educate young children as evidenced by the work of the Children's Television Workshop seems limited also. Early claims that programs like Sesame Street would provide language growth for children have failed.

"Since Sesame Street schools have not had to readjust their first grade curricula to accomodate a new breed of well-prepared, Sesame Street-wise children with higher levels of language maturity (the prevailing belief in the first years of the program)."<sup>110</sup> Before the beginnings of Sesame Street Wilbur Schramm stated: "Most of the learning (from television) is an incidental increment from fantasy programs. In the pre-school years this is a very important learning source. It sends the bright children and slow children to school with vocabularies about a grade higher than children have if they are without the benefit of television."<sup>111</sup> The results of declining aptitude scores and increasing rates of learning disability do not seem to support this pre-Sesame Street claim, nor has the acclaimed program done much to improve the situation either.

Enough is known today which suggests that the cognitive growth of children should remain the central concern of the educator. As long as a clear notion of the processes and stimulae which provide a healthy developmental environment for the child, parents and educators alike can make sound decisions about the influence of all media upon the child. It seems clear that too little information has been provided to the public at large which will assist the conditions for healthy growth. Until this awareness improves, aptitude scores will continue to slip, rates of literacy will decline, the gap between the classes of the society will continue to

widen, and our culture will continue to change.

I don't seek stasis with this prophesy; I wish only to approach a conscious understanding by parents and educators at least, of the complexity and seriousness of the influence of television on the development of the young mind, a task which in itself seems overwhelming.

As Kenneth Boulding suggests, change depends on self-consciousness, and the broadcasting industry are not known for their introspection or self-awareness. They get their feedback from the Neilson and American Rating Bureau ratings, and justifiably so: The financial success of the industry lies in its audience popularity, not its morality. The broadcaster with a social consciousness rarely survives. "(Fred) Friendly's well-publicized departure from CBS became a dramatic symbol of the victory of profits and ratings over the network's sense of responsibility to the public."<sup>112</sup>

An understanding of the medium can be improved by a thorough analysis of the structure and organization of the broadcasting networks, and the political control they exert over the viewer:

Television is a parade of experts instructing the unenlightened about the weather, aspirins, tooth-pastes, the latest books or proposals for social reform, and correct attitudes to have with respect to race, poverty, social conflict, and new moralities. Television is predominantly a world of intellectuals.<sup>113</sup>

Just exactly how does television operate? The buyer, or advertiser, purchases some bait, the program, so that his



product can be sold to the audience. This function involves bringing the audience and advertiser together. Three basic functions must be performed to accomplish this: 1.) The production of programs; 2.) The marketing of audiences which involves decisions about consumer taste for programs and assumptions about the kinds of people who exhibit predictable kinds of television behavior, including children; 3.) The broadcasting of programs and the advertisements to audiences. The broadcasting networks are the primary market managers for programs which are broadcast nationwide, while local stations perform similar tasks for locally produced or originated programs. A direct economic exchange occurs between the advertiser and the broadcaster in that the advertiser is attracted to the programs of the broadcaster by an agent, the advertising agency. It is the agency who plans the overall marketing strategy for the advertiser and who "buys" the participation in network programs or the placement of spot announcements around or between network or regional and local programs. The advertiser "pays" for his audience when he participates in a broadcast. The payment goes to the ad agency, which keeps 15% and sends the balance to the television station itself. The agency merely receives a commission for placing the business. Similarly, the advertiser pays the agency a fee for planning as well as the costs of producing television commercials. All of these costs, however, are borne by the purchaser in the form of "hidden" costs in the



price of the product. So pervasive is the marketing arrangement in the United States that few products can survive without a direct connection with a mediated marketing scheme.

The insidious nature of the scheme is the indirect control which advertisers exert over the content of programs. It is the satisfaction of the audience which produces or "delivers" viewers to the advertiser, not the value of the program in any educational or moral sense. Whatever people will watch will sell product. Even though the complete control of the television medium is in the hands of a small number of people, its success lies in the mores, tastes and whims of those who watch. It may be that the controllers of the medium impose their whims on the witless minds of the viewers; yet, the public at large is a fickle and unpredictable force. Each year marketing men think that they have programming and consumer variables figured out; each year new fads develop and new products fail. The medium does not suffer, however. Programs change. For every one that succeeds, ten fail.

The most important aspect of television "expertise" which bears a strong relationship to this study is the use of children as a "special" audience. Broadcasters have discovered that children are as "marketable" as adults. Speciality programming as well as commercials are designed to sell children. The most evident of this tactic is Saturday morning programming. The sale to children of high-sugar

content cereals as well as toys and games is the basic goal of the programs. Government regulation as well as pressure from public-interest groups has finally forced advertisers to improve their tactics with children. The frequency of advertising messages has been cut back, and the amount of production money spent for children's programs has increased substantially. The influence of the Children's Television Workshop in their production of Sesame Street and Electric Company have helped to upgrade Saturday Morning fare. Still, the largest share of the children's audience is with the commercial broadcasters. A vast gap still exists between the educational needs of children and the ability or desire of the educational or commercial networks to meet those needs.

There are two major sources of empirical evidence that place limits on the possibilities of instructional television for young children. . .Sesame Street does not prepare poverty children for first grade; and Sesame Street does not narrow the achievement gap between the poor and the disadvantaged. Appalachia Educational Laboratory finds instructional television by itself, insufficient to improve the educational and social-affective development of Appalachia's poor.<sup>114</sup>

Television is being used as an instructional medium all over the United States and abroad. There is a project in Africa which uses television to promote and improve literacy in emerging nations. ITV, Instructional Television, is used in schools and in industry as one means of delivering instruction in a variety of subject areas. Public Television offers an ETV, Educational Television, service at the cost of one dollar per pupil for telecourses carried during school

hours. The courses range from specific content areas like Art, Music, Geography, to career awareness and values clarification. Most are very well produced, appropriate to the medium, and seem effective to most educators when properly integrated into a planned classroom format. By themselves their educational value is more limited. Their success lies in the way they are perceived by the teacher and student, as well as the means employed to integrate them into a school curriculum. Regardless, they are not a panacea to improve public school education or eliminate teachers.

The Community College System in Chicago has a television college program which has been operating for a number of years. It offers a variety of telecourses which provide the classroom component for students who, otherwise, would not be able to complete a college program. The main thrust of the program is business courses; however, courses are offered in all subject areas. Longitudinal studies have shown that there is no significant difference between the performance of students taking telecourses and those enrolled in traditional programs. Perhaps the most important value of the Chicago TV College is its ability to provide educational service to individuals who, otherwise would neither seek nor receive it. One drawback of the program is that "the unselected student of normal age watching a TV course in a classroom will not perform satisfactorily unless he is supplied follow-up classroom instruction on a regular basis,"<sup>115</sup>

a factor which has been emphasized by the British Open University's programs. An important UNESCO study, The New Media: Memo to Educational Planners (1967) suggests that careful attention be provided to the following specific tasks by educational planners in the future:

1. the need for improving instruction in the classroom
2. the need to teach those who are and will be the teachers of young and old
3. the need to increase and spread literacy and the skills of living in an urban technological society
4. the need to provide continuing education to adults
5. the need to provide extramural extensions of the school and college<sup>116</sup>

While ETV can address some of these priorities, especially numbers four and five, "as yet, unfortunately, it has done little to offer training in literacy and the skills for urban living."<sup>117</sup>

In the United Kingdom the British Open University offers courses carried over television and radio. It has found that students seem to benefit from a program component which provides interaction with a tutor or counselor regularly throughout the program for success. The isolated use of television and radio programs without a campus component or interaction with a staff member has not been successful at all.

The potential for television as an instructional medium should seem evident from these brief descriptions. What



has been missing in the United States, at least, is a discrimination between the available television resources to assess educational and non-educational factors. It may be that the commercial broadcasting industry is already so vast in the United States that educational uses for television may never mature adequately. It is not necessarily the content of commercial television but how it is utilized by the public, which seems to make a difference. "The issue of the content of television is not a matter of judging 'what is good for the masses', but of understanding the critical role played by television in defining and expressing our culture."<sup>118</sup>

In a medium dominated by an elite, literate, educated class of people, the stratification process which has pervaded most of this country's social institutions including the public school, works further toward the separation and isolation of classes of people. Whether it is the nature of the medium itself--its engagement of the senses as suggested by Kollers, or its appeal to non-linear, associative thinkers--or whether the information explosion that is taking place in this country is forcing changes in the means by which we communicate, television must be reckoned with. "The words and sentence structure of the language practiced by the educated class and therefore in the schools often refers to objects, customs, facilities, thought processes alien to the "lower" classes. . . ."<sup>119</sup>



What if the perception of culture on the part of the millions is, rather, that...the rule of good order is threatened in a dozens transactions every day--by products that don't work, by experts and officials who take advantage of lay ignorance, by muggings and robberies, by jobs and pensions that disappear, by schools that don't work in concert with the moral vision in the home?<sup>120</sup>

Schools do not educate to create self-awareness, nor do broadcasters mediate to enhance perception. Educators swindle the uneducated with promises of knowledge and vocational success while broadcasters depend upon perceptual poverty for success and popularity. Kenneth Bouldings' prophesy is by no means optimistic:

To a very large extent change in the image (knowledge structure) comes about through the impact on society of unusually creative, charismatic, or prophetic individuals. These individuals represent, if we like, mutations of the image. They do not follow the footsteps of their parents. They question the sanctity of the transcript and they defy the sanctions of their superiors and their peers.<sup>121</sup>

Nor does David Littlejohn offer much hope when he says: "Television encourages casual and inattentive reception, exaggerates matters irrelevant to serious thinking. . .and is never likely to be used for the transmission of this first and most precious level of serious thought."<sup>122</sup> If there were a place for culture, education, or thought provoking programming on commercial television, no one would watch.

While television seems to be the boogey man in this discussion, the history of the development of communications media chronicles a wide variety of influences on the senses and sensibilities of twentieth century man. Worth mentioning

here, briefly, are some of the inventions, devices, and gadgets which continue to revolutionize the means by which the society communicates and processes information. When man first discovered that he could take rocks and scratch pictures on the inside walls of caves thousands of years ago, the beginnings of recording began. Few teen-agers appreciate the simplicity of a piece of charcoal or a simple stylus as they listen to transistor radios, portable cassette and 8-track machines. When the black-out struck New York City on July 13th 1977, the staff of the New York Times quickly rose to the crisis. The following quotation taken from the front page of their blackout issue is one indication of the role of technology in communicating during those difficult 22 hours:

To Our Readers:

This is a special blackout edition of the New York Times. Regular pages of the paper's City Edition, prepared before electrical power failed appear inside the paper, starting on the first right-hand page. News and pictures of the blackout appear on the first two pages.

When the power failed, only a handful of copies of the Times had come off the presses in New York. Pages were taken to the plant of the Record in Hackensack, N.J., where they were photographed. Offset printing took place at the Times's satellite plant in Carlstadt, N.J.<sup>123</sup>

Even though radio was an important contribution to communication in this society in the first half of the twentieth century, it still continues to serve an important function of the "wire services", the Associated Press and

United Press International (typewriters which electronically connect each radio station with the major news centers of the country)--keeps people informed minute-by-minute throughout each night and day, regardless of where an individual might be: in an office, in an automobile, on the middle of a lake in a boat, in an airplane, or at home. Such an expansive information network has revolutionized the effect of information upon the individual. Before the advent of radio and wire communications, information was controlled by the current transportation systems: the railroad, horse, steamboat, or human being. The rise in the importance of the American newspaper in the nineteenth century closely paralleled the improvements in modes of transportation: As information was carried more quickly across the American frontier, the nation was drawn more closely together. It is interesting to note that as people moved further away from each other, methods of transmitting information became more efficient. After the settlement of the Far West, it was print that carried lengthy messages from coast to coast. Of course the development of the telegraph, telephone and then radio brought the instant (186,000 miles per second) flow of information across the globe, before the turn of the century. In an analysis of Marshall McLuhan, Kenneth Boulding has written:

Print imposes its own pattern on the page, if not on the mind. It is endlessly repeatable; it implies abstraction. It carries man away from intimate, complex relationships, from Gemeinschaft into Gessellschaft, from tribalism into nationhood, from

feudalism into capitalism, from craftsmanship into mass production, from lore into science. It builds large scale organizations because it develops abstract and simple human relationships, and permits the almost endless multiplication of messages and patterns.<sup>124</sup>

One of the most fascinating effects which the settlement of the United States has had on global communications is that as human beings continually strove to design the networks which would interconnect them to improve and facilitate cooperation among nations--global communications satellites and transoceanic cables--these systems also served to make them even more aware of their interdependence. While print served to abstract messages--refine them into symbolic information--electronics seems to be putting much communication back into a direct, more personal basis.

It would seem that the technology of communication has come full circle in the United States, especially if one benchmark of change, consumer preference, is observed. In 1976, the citizen's band radio became extremely popular, so popular, in fact, that the number of available channels was expanded from 23 to 40 and laws regarding the licensing of operators were simplified to facilitate the licensing of millions of new operators. In less than one year, fifteen million CB sets were produced and sold to American consumers. The futurist of the sixties could not have guessed that consumers would want to talk to each other when low-cost videotape recorders were becoming available, and when



inexpensive sound movie cameras and projectors were being introduced. Ironically, the most immediate form of communication, oral, has captivated the public. Even though the telephone has been in use for three quarters of a century, it still is a tightly controlled medium. The portability, the relatively low expense, and most importantly, the cultish, tribal quality of the citizen's band radio have contributed to its wide popularity. As with the spread of other media in the United States, citizen's band seems to reflect a sociological need. Newspapers--the print tradition--provided the unifying force which helped to create a fifty state democracy. The newspaper met the information needs of the nineteenth century citizen; the medium assured the rise of the organization, the rapid spread of technology, and the multiplicity of the American way. Radio, and television have challenged the print tradition in this country, though. "As communication increases in range. . .it tends to lose in feedback. With increase in range, dialogue passes into monologue." (Mc Luhan) Few citizens can give feedback to their radio or television sets, nor do they feel that they must. The communication of radio and television is not universal. It is controlled by a limited segment of the population--the elite, highly educated--who fantacize about the kinds of concerns and values which lower-class people will respond to. Such fantasies make up much of the

programming of radio and television. Thus radio and television provide their audience with an image of themselves, one which seems acceptable to them--if television's ratings are any measure. Whatever the expressive nature of electronic media, the conscious flow of information, ideas, concepts, myths, mores, remains in one direction only, from broadcaster to viewer/listener. The feedback which exists from viewer/listener to broadcaster is indirect and often unconscious--the results of ratings, losses or gains in audience. The transaction can hardly be called two-way communication. Audiences seem to be satisfied to permit the producers of radio and television programs to do as they wish.

Citizen's Band radio seems to have provided, finally, a means whereby the middle-class of this nation can communicate directly with each other. Speech into a microphone--and successful conversation with another "good buddy" is not constrained by any formal rules of "standard english", or by the operators age, sex, education level or position in society. In fact, the CBers even have their own dictionary now.

. . .speech is a cool medium, developing dialogue response, feedback, complex and intricate patterns of personal relationships, family centered societies, a familistic ethic, tribalism, superstition.<sup>125</sup>

At a time in the development of literacy when reading and writing seem to have lost their relevance, it is no wonder that the middle class--those whom it would seem are becoming

less literate--would seek and find a less complicated, more accessible means of expressing themselves. The advent of citizen's band radio communication is critically important to the prophesy of Marshall McLuhan in 1964 "that we have entered the post-literate age".

A cursory review of popular magazines in the twentieth century reveals an increasing dependence upon visual and pictorial support for the written word. When Life Magazine published its last issue, it was evident to its publisher that the information needs of the public had shifted to television, the more immediate and therefore popular means of transmitting information to the public. Even though magazines like Time and Newsweek have continued to survive, their combined circulation is a mere eight million persons weekly compared to the average television news audience in the evening of 70 million people. Analysis of the Time/Newsweek audience reveals that they are educated and affluent--two attributes which are a result of their high levels of literacy.

The computer too has revolutionized communication:

By the end of the 1960s the fastest computer could handle one million characters a second. It could deliver its results onto microfilm at the rate of sixty thousand characters per second, or make a printed document at fifteen thousand characters a second, or flash them onto a TV screen. But human beings read only twenty characters per second.<sup>126</sup>

The cassette tape recorder has saturated the country. Men, women, and children can record audio information with

greater ease than writing.

In 1960 fewer than 300,000 tape recorders were sold at an average wholesale price of \$153. In 1967, 4,580,000 were sold at an average wholesale price of \$25.<sup>127</sup>

The pocket calculator is but one more of the most recent fads. The cost of a single computer halved in less than one year because of the demand and production of the machines. A four function calculator today costs less than \$10. Recent changes in the microcircuitry of small machines has flooded the consumer market with LED watches and clocks. The units, which are relatively inexpensive to produce, display the time in numerical hours, minutes and seconds, rather than as hands moving around a clock face. As is usually the case in the United States, little thought seems to have been given the effect of these devices on individuals' concepts of time. There may be a significant difference between the perception of the spatial relationship between two "hands" moving in 360 degree arcs on a clock face with the necessary interpolation of the time increments between the printed numbers on the clock face and the reading of 72 numbers in minutes on the LED display system. Certainly there must be a difference in the thought processes necessary to learn to tell time under these two systems. Notions of time and the passage of time are connected with the notational system utilized, even though the impact of the newer system does not seem to have been measured or studied as yet.



The development of communication in the United States is almost unbelievable. The subsequent awareness in the countries' social institutions of the effects of these developments has not kept up with the changes. Most institutions have presumed that most media is entertainment or convenience and therefore unworthy of consideration as a serious social force. As example of the low inference studies currently coming out of the media field, are studies with a concept of media which has allowed media presentation mode and message code variables to exist unrecognized as rival hypotheses with the same general concept.<sup>128</sup>

Until institutions become more serious about the effects of media, especially television, upon children and adults alike little can happen to improve services.

"A social system is largely structured by the nature of the media in which communications are made, not by the content of these communications."<sup>129</sup>

A great deal of inertia has been generated by changes in the technology of communications during the past 500 years. The logarithmic expansion of the access to information which has occurred in the past twenty-five years is almost beyond comprehension. The vast difference between the archiving of manuscripts in the middle ages--for the eyes of the learned only--and the instant global access to millions of bits of information in computer banks and by the microfilming and microfiching of written documents is remarkable. This kind of change has had a devastating effect on the ability

of our society to come to grips with it.

## C H A P T E R I V

### CONCEPTUAL FRAMEWORK AND METHODOLOGY

Issues of literacy can be approached from a broad number of perspectives. Tests of literacy can be assessed. The effects of reading programs can be measured. The success or failure of individuals to read or write material relevant to the conduct of their daily affairs can be scrutinized. The survey of the literature has revealed that there exists no standardized means of assessing literacy. Further, no common definition of literacy exists, nor does one single agency exist to coordinate the work connected with literacy in the United States. There is no general or specific theory of instruction in the field of education. Educational technology, the field which ostensibly takes some responsibility for the instructional uses of new communications technologies, "is not a pure science, an applied science, an art, or an academic discipline. It can be called 'field' only as a term of convenience. It still lacks a central body of theory and a corpus of recognized knowledge. It still lacks well-developed techniques of investigation."<sup>130</sup> In the absence of a corpus or technique, I have chosen to provide some observations from the field, some data generated by one testing instrument, some anecdotal information related to the hypothesis of this dissertation as one means, albeit limited, of investigating the literacy dilemma.

As an educator I rarely have the opportunity, or the time for that matter to scrutinize the various approaches to testing and evaluation which comprise the "state of the art" in public education. I am limited by the expertise in my particular school district as well as the financial constraints of my own school's budget. I take most of my advice from my colleagues. The testing instruments which I use in my school on a year-to-year basis are easily administered, scored, and interpreted. Sometimes they contain information which is in the domain of one specialist; other times they are more general--as is the case of the standardized achievement tests I use.

As I thought about issues of literacy and the ways they affect a rural public school, I realized that I make assumptions about the literacy of students which is based totally on the success of our reading program and the assessments we conduct regularly to measure this success. Further, conversations with staff members provide the subjective information about literacy. The pursuit of these conversations from practical issues to philosophical ones has helped provide a focus for the methodology employed in the conceptual frame work of this dissertation: A discussion with a parent about two dissimilar reading scores of her daughter led to scrutiny of the standardized testing program. Conversations with the reading teacher have illuminated issues about the value of the school's "reading program", just as



day to day observation of the remedial reading program has revealed the difficulty of predicting reading readiness in school and assessing its progress.

I have chosen to present the results of a pre-school screening instrument and its relationship to a pre-school questionnaire which specifies the number of hours each child watches television each day. The data generated by this instrument (It has been computerized by the Supervisory Union for purposes of analysis) is analyzed from two perspectives: The relationship between the number of hours of television viewing and the standard deviation of scores on specific subtests and total test scores and the comparison between specific numbers of hours of television viewing and the average subtest scores and total test scores with normative results in the same categories. The data serves to assess the effect of television viewing in the pre-school years on reading readiness as measured by specific fine motor, gross motor, perceptual motor, and personal/social categories.

The remaining observations herein reflect state of the art practices utilized in the supervisory union where I work: Curriculum guidelines, the structure of a learning disabilities program, the tests and measurements utilized. They serve as symptomatic evidence of one practitioners perceptions of the stated problem: the possible decline of literacy in young children. The choice of this approach is expedient. It also underscores the need for the scrutiny of practices in

public schools that can lead educators blindly: The value of a pre-school testing program which may be symptomatic rather than causative; the use of standardized instruments which are designed to make the school look good at the expense of erosion of basic school principles; the feedback by teachers which doesn't challenge any of the assumptions for their methods and choices of materials. The approach is limited, but appealing to a practitioner working in the field who wants a realistic means of standing back from what he is doing to be more objective.

## C H A P T E R V

### ANALYSIS OF DATA AND FIELD OBSERVATIONS

The data herein is derived from three sources:

1. The Kent Pre-school screening instrument.
2. Field observations of a fifth-grade class.
3. Anecdotal material relevant to the hypothesis.

The Kent Pre-school Screening Instrument. The pre-school evaluation cited here is the work of Carolyn Kent, O.T. It combines a number of pre-school testing instruments into a short, easily administered and graded tool which is utilized primarily for the assessment of readiness of pre-school children for the kindergarten or first grade. The test is comprised of four subtests:

- Fine motor behavior
- Gross motor behavior
- Perceptual motor behavior
- Personal/social behavior

The test of fine motor behavior is designed to test the child's ability to copy a square, circle, or diamond. The child is also asked to "draw a whole man, the best one that you can", and the child is asked to write his own name. Eye pursuits--vertical, horizontal, diagonal, and convergence are observed and noted. The test presumes that possession of skills which permit the child to complete these simple

tasks will predict success in the recognition and performance of first grade tasks connected with learning to read and write.

The test of gross motor behavior is designed to test the child's coordination as he balances on one foot with his arms folded, does a standing broad jump across a space of 15 inches, catches a bounced ball and catches a self-thrown ball higher than his head, walks backward heel to toe, and skips. The footedness of the child is noted as to right foot or left foot. Use of this test presumes that acceptable performance is one indicator that the child will be successful in school in tasks which require coordination: playing games, learning to read, learning to write. Further, delayed or poorly developed gross motor skills are associated with the acquisition of reading skills.

The test of perceptual motor behavior is designed to assess the imitation of postures and the touching of the fingers of the right and left hand to the thumb. It measures visual matching, the perception and identification of similar figures on a card, visual memory, the perception of a figure which is then covered for five seconds and identified from memory on another card, motor accuracy - the ability to manipulate a pencil to draw a line between two other lines placed the same distance apart but curved "like a boy or girl walking to school along a path", and auditory memory--the perception by hearing a number of claps with the back turned and counting of the claps, and, finally, the following of



simple auditory directions. Success at these tasks is felt to replicate some of the kinds of perceptual demands which face a school-age child in the classroom.

The test of personal social behavior is designed to assess the child's ability to count objects up to ten, to choose between a dime and a penny, to ascertain what the child would do if he cut a finger, and to compare a plum and a peach as to sameness. The cognitive skills measured by this test reflect the child's integration into the social environment. (See Appendix)

Gesell and his contemporaries have determined that poor test performance in tests of the psychomotor domain (fine motor, gross motor, perceptual motor, and personal social) is a predictor of difficulty in the development of basic reading and writing skills. The use of the test as a predictor of readiness to read presupposes the existence of readiness skills by the time the child enters school (either kindergarten or first grade). Such a test does not, however, measure the language development of the child--a factor which can also affect reading readiness.

The Kent Readiness Test is administered with a questionnaire that the mothers of pre-schoolers answer. Comparison of the Kent test with answers to one question of the questionnaire provides some interesting data which is relevant to the hypothesis. The question is, "What is the approximate amount of time that he or she watches TV?" The answer to

this question and the specific subtest scores and total test scores for the respondents are tabulated in the appendix.

Test scores generated over a two-year period are used here. In 1976, 127 children were screened, 87 kindergartners and 40 first graders. The scores of the kindergartners are developmentally lower than the scores for the first graders. Their reported hours of television do not differ, however. In fact, the viewership reported for the kindergartners is higher, on the average, than that for the first grade group, a factor which can best be attributed to the presence of CCTV in the communities where the kindergarten group was tested. In 1977, 99 children were screened, 72 pre-kindergartners and 27 pre-first graders.

Results of the Kent Readiness Test. There does not seem to be correlation between the total readiness score for each child and the number of hours that child watched television. (Significance in this study is determined by the difference between the score of a specific subtest or total test score and the mean score in that category. The listing of norms and standard deviations is included in the appendix.) The only significant factor from the data is that more children who reported viewing little or no television at all (.5 hours or less of TV daily) scored at or above one standard deviation than within or below the norms. No children who scored below one standard deviation reported watching no

television. Similarly, the children who reported watching the most television as pre-schoolers scored within the norms but not, necessarily below them. Hours of pre-school viewership, then, do not seem to significantly affect the total readiness scores of the children who fall within the norm group.

The following approach was applied to the analysis of the data to assess the effect of hours of television viewing. The subtest scores as well as total test scores were tabulated for children who watched television for the following times each day: less than an hour, less than an hour and a half, two and one half or more hours, and three or more hours. There is no significant difference in the average performance on subtests or total test for any of these tabulations, a fact which is important, in my estimation. (One possible reason for the consistency of these scores is that the number of hours a child watches television is not, necessarily a determiner of readiness. Perhaps the fact that the child watches television to begin with has an effect. It may be that so many children tested have experienced television in the pre-school years that the overall readiness of the group may be depressed--that is if a comparison could be made with a similar group who had not had television experience.) Among the cases who took the readiness test, five children reported watching no television at all. Their subtest scores were not as remarkable except in the fine

motor category. Three out of four who reported subtest scores were never received.) Further, only one subtest taken by this group showed a score significantly below the norm.

There is some significance from the data in the effect of television viewing on specific subtests. A total of 87 children responded to the television question and reported their hours of viewing. These 87 average slightly less than two hours of television viewing each day with the pre-kindergartners watching slightly more television each day by nearly a quarter hour than the pre-first grade group. In the test of fine motor behavior, 36 children scored significantly higher or lower than the norm. Those who scored higher, 13 children, watched nearly one-half hour less television each day than the norm. The 23 who scored significantly below watched slightly more television than the average. On the test of gross motor skill 42 children's scores were significant. The 18 who scored above the norm watched more than one-half hour less television each day and those 24 who scored below showed little difference in their television viewing each day than the average. In the perceptual motor test 48 children showed significant scores. Thirty-two children scored above the norm significantly and watched slightly less television each day than the average. The 16 whose scores fell significantly lower showed little or no difference in viewership. The personal social test had 35 children with significant scores. Those who scored higher



watched slightly less television each day than the norm or those who scored significantly lower.

The conclusion of this analysis of the data is that pre-school television viewing does affect a child's performance in specific sub-test categories; however, the amount of difference in the television viewing of pre-schoolers is too slight to be of great significance. Even though there seems to be a slight effect of television viewing on the readiness scores of specific subtests, the total test scores show no effect of viewership on readiness, a fact which suggests that the effect of television viewing is specific in only one or two psychomotor areas in each child, rather than widespread. The two areas of greatest effect are the fine and gross motor areas. The absence of TV viewing of from one quarter to one half hour of television viewing each day (the average viewership is about two hours as reported in this sample) does have significant effect on the readiness scores of these children. Those who score significantly lower in these two categories do not watch a great deal more television than the average. (See appendix)

I conclude that there is an effect of television viewing upon pre-school readiness, although it is not significant in most areas assessed. What is missing from this analysis is a prediction of the scores or range of scores which foretell difficulty in school. It would be of value to follow the progress of these children through the first six years of

school to measure their success as readers as well as the diagnosed reading and writing problems they exhibit. It is interesting to note that among the group of children tested from my school, only one child was assessed as having a potential learning problem. One second grade, the children who were tested in 1976, has but two children who are receiving remedial help in reading. There are an additional 32 youngsters in grades three to eight who receive remedial assistance, mostly in reading. It may be that the two years of this sample are not representative of the school population. Regardless, the data suggests that there may be other factors at work which affect pre-school readiness besides television viewing.

I was initially baffled by the data which suggests that hours of television viewing do not significantly affect the readiness score of the pre-schooler. I would have guessed that the amount of television which a child watches would directly affect his readiness, a situation not indicated by this data. I can only surmise that other factors in the pre-school environment contribute to the overall readiness of the child. These factors can offset the effects of television viewing on the child: The child reads or is read to; the child is encouraged to build models, and work with manipulative games, to play games with other children and to exercise. The child whose pre-school environment provides a healthy mix of these activities besides watching television will be better

prepared than the child without them. We do know that television does not provide assistance in the development of the psychomotor skills assessed, according to the data. It may be that the negative effect of television viewing is the amount of time it takes a child away from more necessary pre-school experiences--necessary in the sense that the experiences provide the foundation for readiness skills not provided by the television set. Thus it seems that there must exist a conscious mix of pre-school experiences--which doesn't necessarily contain television experience--to assure readiness, or at least the skills measured by the specific subtests of the instrument. The child who has grown up in a "passive" environment--one where he and his peers determine the value of each day's experiences--may be poorer prepared for school than one from a more "active" environment--one where a parent is making conscious choices each day about the quality of pre-school experiences which are of value to the child's readiness for school. Exposure to a television set two, three, four, or six hours each day without a balance of other necessary experiences may not suffice.

The limitations of the data generated by the Kent Readiness Test are many: The test itself is not designed to measure the influences of television on the child, nor do any casual connections exist between television viewing and readiness which can be measured by it. The number of children tested is relatively few. The data base in each of the analysis is

smaller. The number of hours of TV viewing seems low when compared with the national average. This questionnaire question about TV viewing is a poor one, as is the possible interpretations of the responses. (The question can be interpreted as how much television the child watches in a day, week, or month.) The parent can decide whether the answer reflects the child's sole control of the TV set or if it represents the hours the set is on and watched by the child and other members of the family. The truthfulness of responses to the question is hard to judge. Parents of culturally advantaged children tend to be self-conscious about use of the TV set in the home, while the parents of less advantaged children may take great pride in their ownership and use of a television set. Neither of these factors is accounted for. The subjective nature of the questions leaves room for broad interpretation.

Field Observations of a Fifth Grade Class. I began this school year by choosing what I deemed a simple textbook for a fifth grade language arts class. The text, published by Laidlaw in 1963 combines a number of skill areas into one volume: Grammar, composition, oral communication, and language mechanics. The first day I used the text, the students were told to open their textbooks to page 14, a lesson in sentence recognition.

## 2. Beginning and Ending Sentences

You have learned to be careful about the way you



begin and end sentences. You know that every sentence begins with a capital letter, and every sentence has a mark at the end.

Here are three kinds of sentences you know how to write correctly.

1. Have you seen a jet plane take off?
2. No, I have never seen one.
3. Come to the airport with us tonight.

(illustration)

The first sentence is a question. It has a question mark at the end. The second sentence is a sentence that tells something, or a statement. It has a period at the end. The third sentence also has a period at the end, but is not a statement. It tells someone to do something.<sup>131</sup>

In the center of the page there was a full-color illustration of an airplane taking off. I watched as the children read the one-page assignment to themselves. Some subvocalized as they read; others pointed with a finger, pencil, or used a paper marker to read. All finished reading the assignment in what I would consider a reasonable amount of time.

I began the instruction portion of the lesson by asking all the students what the assignment was about. None could find an answer. I asked a number of individual students by name what they had read, and one or two stared at the page and answered back in sentences which were before them on the printed page. Not one of the students saw that the assignment was titled at the top of the page, or recognized that "2. Beginning and Ending Sentences" was what the material was about. None of the students recognized that the boldface words at the bottom of the page, "question mark" and "period" had something to do with the subject of the

assignment. Frustrated with their performance, I had them all go back to the beginning of the assignment to re-read what was before them. I had one student read each paragraph aloud. At the completion of each reading, another student summarized in his own words what had been read.

At the completion of the lesson, I gave an assignment orally, and then wrote it word for word on the blackboard for all to see and copy. The page their new assignment was on appeared as follows:

#### Practice - Talking and listening

Read the sentences below. Which sentences ask questions? Which sentences make statements? Which tell someone to do something? How would you write them?

1. the boys went to the airport with Bob's father
2. they heard a loud noise
3. is that a jet plane taking off
4. a jet plane had just taken off
5. do you see that trail of smoke in the sky
6. you cannot see the plane but you can see the smoke
7. listen for the roar
8. did you ever hear such a loud noise
9. would you like to fly a jet plane
10. go out through this door

#### Practice - Writing correctly

A. Write the sentences in the exercise above. Be sure to begin and end each one correctly.

B. Write ten sentences that you may have heard in your own home. Have five of them statements and five of them questions. Be ready to put them on the board.<sup>132</sup>

The assignment was to write Practice-Writing correctly, Part "B", on page 15. More than half the students came in the next day with the ten sentences above under Practice-Talking

and Listening written on paper. The others either could not figure out what to do or forgot to copy down the proper assignment. The devastating reality of this situation is that these students, fifth graders in the elementary school, were not reading. They all were going through the motions of reading, as I am certain they have for at least four years; however, there seemed to be little correspondence between what was presented on that particular page and the meaning they derived from it. Here are some of the possibilities which might explain the situation:

1. The textbook was not appropriate for the age and grade-level.
2. The material was improperly taught.
3. The children were not adequately prepared for such an assignment. There was little or no transference between reading class and the demands of the language arts class.
4. Too much was expected of the children.
5. The children were illiterate.
6. The children were learning disabled.

All of these possibilities have passed through my mind as I prepare lessons which will help these children learn English in an elementary school.

1. The textbook was published in 1963, which means that it probably contained material which was appropriate--according to the publisher--for children going to school in 1960. The typography is fairly traditional, as is the lay out and general appearance of the text. The illustrations are

stylized and somewhat old-fashioned by today's textbook standards. The content of the text is compatible in a large number of skill areas with a curriculum guide which was completed during the summer of 1977 by the Supervisory Union in which the school is located. Specifically:

The entry level skills for fifth graders in the area of language mechanics are as follows:

2. Recognize and write end punctuation for sentences:

- a.) Declarative
- b.) Imperative
- c.) Exclamatory
- d.) Interrogative<sup>133</sup>

2. According to most accepted elementary methods practices, the use of instructional media can enhance the presentation of most topics. In the lesson in question, the introduction of the topic--perhaps using an overhead transparency--or the use of other graphic or pictorial aids would probably have improved the effectiveness of the presentation. Elementary age children do not seem to be prepared to be given a printed page and expected to understand it.

3. As the quoted curriculum guide has stated, students entering the fifth grade should have mastered--as a minimum requirement--an understanding of sentence punctuation.

4. I suspect strongly that I had expected too much of the children, in that I had given them a printed page and expected them to understand what was written on it, or at least to be able to tell what the subject or topic was. The



difficulty I have with this notion is that as educators we continue to tell children and their parents about the value of learning to read. In his book, Reading: How To, Herbert Kohl points an accusing finger at the reading programs which are used in elementary schools today. He feels that they compartmentalize reading into a structure which is alien to what reading really is.

. . .completely individualized and structured reading programs. . .all predetermine what a student must do and attempt to manipulate the student into following directions and trying to move faster and faster along a prescribed path. Their goal is generally to produce students who make good scores on standardized tests rather than develop sensitive, socially and politically aware readers.<sup>134</sup>

I think that the experience I describe above illustrates this point precisely. These children succeed as readers when they are involved with predictable "safe" reading experiences where they already know the formula for success. They know where context clues appear, and how to outsmart the text in many cases.

Marshall McLuhan alludes to a notion of a mosaic approach to understanding. In fact, a number of his books are written in that fashion. Such a notion seems a feeble attempt to explain the difference between television "images" and print symbols. It does serve a useful purpose in this discussion of the difficulty of children learning to read. Perhaps the reading series (Ginn & Co., Scott Foresman & Co.,

Economy Company, and others) which are used in elementary schools take advantage of a skill (as yet undefined) in children which I will call "mosaicing"--that is, the ability to understand formatted print materials by learning a recipe so that they respond successfully to measurement instruments which are designed to assess progress. How much of their success is reading or defining the format is a matter for speculation. Perhaps "mosaicing" can be explained as a modern phenomenon related to Ornstein's brain dominance theories or by state of the art procedures in the formatting of television programs (which, like the format of the reading program, assures predictable events within fairly rigid and predictable time frames). The reading program does leave the student, fortunately, with the basics of written language: graphemes, words and sentences. This much cannot be said for television. Perhaps the format can bias the reading success of some children to inhibit the easy transference of acquired "reading skills" to other reading materials--especially in children who read below grade-level.

When some of the fifth grade children took the assignment home, they had the opportunity to ask their parents what they were supposed to do. On future assignments, a number of children were successful at completing the assignment. Many reported that their parents had helped them.

That is, the parents had read the instructions and had explained to the children what they were to do.

At issue here is not the childrens success or lack of it at completing the assignment. It is their seeming lack of understanding of print and the meaning which it conveys. The children could not discriminate between the "Practice-Talking and Listening" and "Practice-Writing Correctly". The favorite question asked in the classroom is, "What am I supposed to do?" My reply continues to be, "What do the directions tell you to do?" In desperation, I have resorted to using a remedial duplication package which provides worksheets in all the skill areas for these children. We still use the same textbook--I don't have an alternative as yet--but only after the material has already been presented in another form. The problems still remain, but the children seem less frustrated. The worksheet--one is included here--give the children a minimum of print to wade through, as well as at least one written instruction to follow. We have used two dozen of these sheets, thus far. The children are successful at completing them after they receive a lot of reinforcement and individual attention when they get confused. Not one student has "figured out" the sheets yet, though. That is: None has recognized that the subject of the sheet is contained in large print at the bottom of the page, or that the point to be learned is at the top of the page

page. Similarly, few seem to understand that the directions for completing the written portion of the sheet are contained in smaller type after the example. Most continue to ask, "what am I supposed to do?" The remarkable result of the use of these worksheets is that the children can complete a series in one skill area and still not know what they have been studying. It is as if the content of the class were an activity which does not correspond with anything real that might be relevant to the child. (such is the relevance of teaching grammar, I suspect. Scholars like James Moffitt are saying the same thing.) Why, then, did grammar have a value when other generations were in school? Too, why did those generations seem to be more fluent with reading and writing?

5. I doubt that the children are illiterate. I do suspect, though, that they are less literate than their parents were as fifth graders.

6. Perhaps these children are learning disabled. Since no one in this country seems to be able to define a learning disability, I will have to rely first on the definition which has been established as a guideline in this particular elementary school and then, perhaps, attempt to provide some suggestions about what I call "the learning disabilities myth".

For purposes of identifying a child as having a specific learning disability, the following definitions are adapted from the Lebanon School District:



10. Severe Learning Disability (Neurological impairment) - A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include learning problems which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance, or of environmental disadvantage. The severely learning disabled student may or may not function in the normal classroom. If the severely learning disabled student is assigned to a regular classroom, his program would include specialized consultation help to the teacher, a prescribed program including materials, techniques and a large portion of his/her time with a specialized teacher.

11. Moderate Learning Disability (see above) - The moderate learning disabled student may function in a regular classroom with an individualized learning plan which might require different materials, specifically prescribed teaching techniques and some time with a specialized instructor. His program generally includes long-term planning.

12. Mild Learning Disability (see above) - The mildly learning disabled student usually functions in the regular classroom with some individualized planning and remedial help from the specialized teacher. The program is generally short-term and supportive.

In order to be classified as either moderately or severely learning disabled, a student should exhibit a severe discrepancy between his actual achievement and his expected achievement in one or more of the following areas:

1. Reading (word recognition and/or comprehension)
2. Mathematics
3. Spelling
4. Written expression

We suggest that a severe discrepancy be defined as follows:

1. First grade: performance on a standardized readiness measure (s) of minus two standard deviations.
2. Second grade: performance at grade level 1.0 or below.
3. Third grade: performance at grade level 1.5 or below.
4. Fourth grade: performance at grade level 2.0 or below.
5. Fifth grade: performance at grade level 2.5 or below.
6. Sixth grade: performance at grade level 3.0 or below.
7. Seventh grade: performance at grade level 3.5 or below.
8. Eighth grade: performance at grade level 4.0 or below.

Any student classified as either moderately or severely disabled is considered a priority for placement in a learning disabilities program. The determination as to whether a given child should be labeled as moderately disabled rather than severely disabled rests with the placement team and is based on the following considerations:

1. degree of discrepancy - an eighth grade non-reader would probably be labeled severe, while an eighth grader reading at the 3.5 level would probably be considered moderately impaired.

and/or

2. pervasiveness of the problem - a student with severe discrepancies in two or more areas would be labeled severe while a student with a severe discrepancy in only one area would be labeled moderate.

The above criteria would apply only to initial placement. Once a child was enrolled in a learning disabilities program, he would automatically be dropped when his achievement progressed beyond the severely discrepant level. A child could, however, move from being severely or moderately disabled to being mildly disabled.<sup>135</sup>

The neurological impairments described seem to correspond with the kinds of behavior observed in the classroom for the fifth graders. As a practical consideration, two members

of the class have been classified as mildly learning disabled as a result of their achievement on standardized reading tests. Their behavior in class, however, is no different from that of the other children.

The use of learning disabilities labels, as well as the establishment of learning disabilities programs is in vogue, today. It's where the action is; it's where the money is. The Chapter 766 legislation in Massachusetts set the tone for a nationwide awareness of the handicapped children from the ages of 3 - 21 as specified in the statute. Therefore, school districts all over the United States are labeling many children.

In the State of New Hampshire, project "Child Find" was instituted in 1976 to unearth handicapped children who were not receiving the education they needed. As a means of attracting Federal Dollars to the State and school district, thousands of children with a variety of neurological, emotional, and physical handicaps were reported. Diagnosis and prescriptions for their programs have been written. When the efforts to assess those in need in this particular elementary school were completed, nearly 20% of the school or 35 children were reported. (A statistic which is not unreasonable for many schools.) Of these 30 were reported with mild learning disabilities, a clear reflection of their reading difficulties.

It is quite possible that a decline in the literacy of

young children is contributing to this learning disabilities situation:

- Children are not involved with the same kind of reading readiness experiences in their pre-school years as their parents were.

- Television, for one thing, is competing for time which, traditionally, has provided interaction of pre-schoolers with siblings, parents, and the physical conditioning which is a requisite for good health.

- Children's pre-school environments have changed to the point that they have not developed their auditory and visual perceptual skills or their psychomotor skills at the same rate, or to the same degree which their parents had when they were children.

The consistent villain in all these possibilities is television.

Learning is made up of a variety of experiences. There do not seem to be any standards for the kinds of language experiences or reading readiness experiences which prepare a child for school. The amounts of peer interaction, parent-child interaction, physical conditioning, and psychomotor experience certainly varies with each child. If parents take their children's reading readiness for granted--if they use the television set as an electronic babysitter--and not establish themselves as role models when it comes to reading in the home, then the outcome of the child's performance as a reader may be prejudiced.

Necessary for success in school are the following skills:

1. Experience as a listener of parents and peers.



Hearing and listening are considered different levels of the same activity.

2. Experience with print as an important currency of information by being exposed to printed material and children and adults using it.

3. Developed skill in the psychomotor areas: fine motor, gross motor, perceptual motor, and personal/social which reflects a sensible balance between activity and time spent passively sitting in front of a television set.

Anecdotal material. As an educator I have been fortunate to have worked in a variety of educational settings: an elementary school, high school, junior college, and a graduate-level teacher education program. Within the context of each of these settings, issues of literacy have appeared which have offered subjective evidence that led to the specific inquiry of this dissertation. While I have tried to avoid subjective bias, the conclusions I have reached as a teacher seem worth sharing.

While teaching visual arts to high school students I discovered that they lacked the language skill necessary to organize their thoughts effectively for the visual media, photography and film. In fact, many of the students who were attracted to the photography courses seemed to use the medium as their only expressive medium. The student with the camera around his or her neck was much more visible than the student carrying a pen or pencil. There seemed to be a popularity to the visual arts which became faddish. The students most attracted to the courses were many of those who were having difficulty with the academic programs. It

wasn't so much that they were less intelligent, but that they hadn't achieved a great deal of success as readers and writers. Further, the most successful students in the courses were the bright, literate students, the same ones who were on the honor roll in the other academic subjects. My conclusion from this experience is that the organization of ideas implicit in literacy was necessary for success of many students in the visual arts as well.

While teaching junior college students I assigned a term-paper on Ken Kesey's novel, "One Flew Over the Cuckoo's Nest". As an alternative I allowed some of the class members to go to the movie instead and write a paper about it. Those who read the book seemed more able to communicate Kesey's meaning more capably than those who watched the movie. The papers of the movie-goers reflected intricate plot details; those of the novel readers seemed more fluent analyses of the theme. The conclusion that written material provides a better opportunity for understanding seems evident.

As the staff person for a graduate-level master's program I observed master's candidates who resisted reading and writing assignments. The program was experiential and attracted students who were interested in observing and doing. Somehow, these expectations affected these students' motivation to read material assigned by the staff. Heated debates and arguments were mounted in resistance. Some members of the program exhibited such poor facility with the

written language that individual remedial assistance had to be provided by the staff in the preparation of the reports which were required as part of their programs. Their lack of adequate preparation was evident as was their difficulty with the medium. Their choice of a program which was experiential seemed to reflect their lack of confidence with written language.

Our oldest child, who is 15, is an avid reader. He also likes to watch television. The quality of the particular TV program is what helps him make a viewing decision. He will read and re-read favorite books before he will sit in front of a TV set mindlessly. Neither my wife nor I nag him about watching TV. On the contrary, we have to nag him to put down a book so that he will do his chores or come to dinner. His standardized test scores in Reading are at or above the 99th percentile. Our three-year-old does not read yet, but loves to be read to. Most stories which we read to him are committed to memory by him before long. He then can tell us the story as we turn the pages of the book. When being read to he is silent and attentive, more so than any other time of the day. He sometimes asks questions about what he is being read. He watches about one half-hour of television each day, Sesame Street. He likes the muppets and considers them his friends. He owns a number of books which have the muppets as central characters in them. Other than Sesame Street, he is bored by other TV programs,

perhaps because other members of the family do not watch them attentively with him. Occassionally he will sit with me and watch Arthur Fiedler and the Boston Pops on Sunday evening. My wife and I are conscious about our TV viewing choices. The reception where we live is poor; we have a limited number of program choices most of the time.

We don't subscribe to TV Guide and only occassionally save a program guide from the newspaper. The benefit of the rural area where we live is the definite lack of a grade "B" television signal in many communities. I guess that my children are part of an "active", literate environment. I surmise that they will not be learning disabled.

One irony of these observations and anecdotes is that they seem to challenge the definition of learning disabilities which is accepted in this supervisory union. The definition states that "the term does not include learning problems which are primarily the result of . . . environmental disadvantage."<sup>136</sup> The term environmental disadvantage may mean lack of readiness because that term may describe more accurately the condition of many children when they arrive at their first school experience.

It is curious that studies of regional speech patterns and dialects show that people who move to different locales will take on the speech habits and sounds of the natives of that part of the country or world; however, children do not take on the "sound" of television. I conclude from this



that children do not receive the same kind of language experience from television that they receive from interaction with other children and adults. The child who spends one hour each day in front of a television set between the ages of three and six will have spent more than 1000 hours during which he might have received a more valuable language experience, physical exercise, or psychomotor experience. Each additional hour of television detracts another 1000 hours of potential language and psychomotor experience to the pre-schooler.

The educator is put into a particularly difficult position. He must either take each child where he is in his readiness for kindergarten or first grade and work with the symptoms of dysfunction, or he can try to begin to help parents to understand the degree to which they contribute to the readiness problem. If educators continue as they have, the remediation of learning disabilities may never succeed because it works with symptoms rather than problems. The influence of the home on the child, the influence of television on the home, and the influence of changing society on all people and institutions is far too pervasive and irreversible to combat with symptomatic solutions.

As a classroom teacher I am left, finally, with some theories and a relatively limited means of putting them into practice because schools have little direct contact with children until they arrive at the door.

The administration of more "modern" tests (those normed more recently), and the purchase of textbooks which incorporate newer technologies into the teaching of literate skills are not solutions to the dilemma. The State special education programs and their administrators, specialists and teachers contribute unwittingly to the problem. As the accountability for decisions regarding placement of students in programs becomes more stringent, so must the dependence on batteries of appropriate tests. Similarly, when budget decisions are made, up-to-date specialized materials are purchased to remediate the problems. When specific testing instruments are cited as guidelines for local educators to diagnose problems or assess program effectiveness, or when specific specialists are demanded to make diagnosis and write prescriptions (those who are most often recent graduates of newer programs designed to meet the increased demands for specialists) contact with the past is severed. The standards of literacy which may have been established disappear, as do the testing instruments which provided those standards. The issue is not a criticism of testing or personnel per se. It merely demonstrates the irony implicit in many of the administrative practices today. Literacy, the foundation upon which public education was begun in this country can decline right under the noses of the specialists and technology which have been created to protect and promote it.

## C H A P T E R   V I

### THE FUTURE AS A PERSPECTIVE

As Alvin Toffler has suggested in Future Shock, "The future is not merely a subject, but a perspective as well, and. . .strong currents of change in the world. . .make essential a total conceptual revision of the notion of knowledge itself."<sup>137</sup> It is evident to Toffler and many like him that the present day relationship between knowledge, ideas, meaning and understanding have changed--specifically the use of print as the sole means of acquiring knowledge at a time when we seem to have entered a "post-literate" age.

The increased saturation of this nation by electronic media--television, radio, telephone--has changed, better still, revolutionized the methods by which information is transferred among all segments of the population. The revolution is not unlike the changes which the invention of written language brought to ancient Mesopotamia before the birth of Christ, or which the invention of the printing press brought to Europe in the fifteenth century. Fortunately, the invention of the printing press has provided twentieth century man with levels of literacy which enable him to both analyze and understand the sociological impact of the changes in the technology of communicating. Undoubtedly, the discovery of moveable type has been the most significant event

to the development of Western thought and politics.

The modern school has always been the principle arena for the development and training of literacy in Western society. Even though spoken language is acquired naturally, the development of reading and writing skills must be taught. Ultimate responsibility for this development rests with the primary and secondary school; however, no organized mandate exists to maintain levels of literacy across the country. Instead curriculum seems to be determined by software suppliers and publishers, and teaching seems to be directed toward an implementation of textbooks and multimedia kits which assures the expanding expenditure of large quantities of money.

Toffler has suggested some additional guidelines to sensitize more members of society, especially those concerned about education, to the demands of the future:

1. Technology and social change are outracing the educational systems; social reality is transforming itself more rapidly than our educational images of that reality.
2. The concept of the future is closely bound up with the motivation of the learner: How children or young people see their academic performance and. . .their ability to live, cope, and grow in a high-change society.
3. The future is a matter of concern not simply of graduate students but of the youngest elementary school children as well."<sup>138</sup>

His suggestions seem to indicate that there is a wide gap between the demands of this society and the ability of the educational system to meet them. It may be unfortunate that



the value of literacy--the basic building block of public education--may be lost in any large scale revision of the educational system as it attempts to keep up with change.

Levels of literacy have changed in the last 150 years in the United States. Schools have tried to keep up with the demands of society, but as the inertia of society seems to have moved away from literate basis, the ability of schools to continue to provide proper programs has diminished. The confusion over the importance of media in the culture has moved the English curriculum away from basic reading and writing by proliferating courses in media, film, photography, speech and oral communication, and non-verbal communication. New terms like visual literacy and emotional literacy abound. This crucial misunderstanding of the process of reading has concluded that children learn more from mediated information than from print alone. It is unfortunate that changes in the teaching of reading and writing have not reflected an awareness of the decline of literacy among school-age children. The SAT report states:

During the five-year period there were increases of over 50% in the number of English/Language Arts courses offered (at least as indicated by course titles) in the 43 Massachusetts high schools; the two most commonly added were Science Fiction and Radio/Television/Film. . .between 1968 and 1973 over a quarter of all high schools in the State added courses in Film Making; the number offering 11th grade English and World History went down. . . In California, for example, it is reported that enrollment in basic English courses fell 19% between 1971-72 and 1974-75 and in English Composition classes it plummeted 77%. . . 139

Since 1969, the National Assessment of Educational Progress has been attempting to evaluate the writing skills of Americans between the ages of 9 and 35. "The judges, a panel of English teachers and scholars from across the country suggest that most of those tests in the assessment have been strongly influenced by the simplistic spoken style of television."<sup>140</sup> Author E. B. White has said, "Short of throwing away all the television sets, I really don't know what we can do about writing."<sup>141</sup>

Even with the return to the basics movement in full-swing, "Why Johnny Can't Read and Why Johnny Can't Write" headlines criticize education in the popular press. (The non-reading illiterate don't read the popular press anyway.) The media specialists in public school systems are purchasing sophisticated hardware which provides the teacher with materials that will gain the attention of the student in the same fashion as the television set in the home. That electronic media have had a profound influence on changes in education in the United States is unquestionable. It is an understanding of the causes as well as effects of this change which seems more recondite.

One problem for the future is to stimulate an awareness of the impact of electronic media on a literate culture and the means for children, parents, teachers, administrators, and politicians to appreciate the value of literacy as well as to develop a system of education which can span the

boundaries between two dissimilar methods of disseminating information--print and television. The impact of electronic media upon the culture is under investigation. The attention which has been paid to the relationship between media and education has sought to integrate the technology of media into instructional methods rather than to explain the possible influences of the processes of mediation on the learner. Thus the possible deleterious effects of television viewing on the development of reading skills has not been adequately investigated.

The subject of this dissertation has focused on the readiness of the pre-schooler. As Jerome Bruner suggests, "a theory of instruction should specify the experiences which most effectively implant in the individual a predisposition toward learning. . .For example, what sorts of relationships with people and things in the pre-school environment will tend to make the child willing and able to learn when he enters school?"<sup>142</sup> What most elementary educators observe is a wide variety of symptoms of reading dysfunctions. First graders do not develop quickly enough to enter second grade. Scores on reading tests fall behind grade level and continue to fall as the child advances from grade to grade. Few elementary educators can concern themselves with the language and non-language experiences which the pre-schooler has had. One variable though, television, is present in the pre-school history of nearly every child.

The source of information for this particular study has come from a rural school district located in north central New Hampshire. The area is an interesting one because television and radio do not pervade the lives of all children to the extent it may in more urban areas of the country. The lack of a grade "B" television signal in many communities, or lack of CCTV service (Community Cable Television) explains this phenomenon. The study does not attempt, however, to explore social or economic factors which may affect the readiness of the pre-school child. As rural educators we have made some assumptions about conditions in the home which contribute to problems of social adjustment; As well, we presume that the readiness of the preschooler in a rural area is different from that of the urban or suburban learner. I have not attempted to qualify or quantify these differences in this thesis.

A "theory of instruction"--as outlined by Bruner--would presuppose specific conditions in the home of the preschooler which could serve as predictors of success. Without such a theory, though, I must rely upon a frail hypothesis: that there is an effect on the readiness for school which is directly influenced by television. The effect is twofold: Television provides a strong attraction to the child which competes for valuable skill building time and television offers the child little opportunity for sound cognitive development. It has been shown that the psychomotor and personal-



social skills which are important to a child's readiness for reading are not available from television. While there may be other activities which distract the pre-schooler from play or work which can assist readiness, television is, certainly, unique in its ability to attract children as well as its inability to develop readiness skills. Implied by this study is the different amounts of time children seem to need to develop these skills. The distraction of television is one factor in determining the time spent on readiness activities by each child. Television's use by the child in the first place, as well as the amount of time it takes some children away from readiness skill-building are crucial concerns for parents and educators alike. As far as television's value to cognitive development is concerned, no means of measurement has been developed. There are, however, some opinions about its value. Television supporters claim that TV children possess greater knowledge of the world. I have cited vocabulary gains and letter and number recognition skills as benefits. Critics of television claim that it is the process of viewing which prevents higher cognition. There are known functions and dysfunctions for most cognitive processes. Some are understood; others are observed and studied. There is, however, no known television viewing disability, nor has a child been observed in such a condition. One opinion about the lack of a viewing dysfunction would be that it takes little cognitive skill to watch a television

program. It seems hard to conceive of a disability for a process where so little ability is required. In the final analysis, it would seem that test scores would improve, children would be more easily educated, and educators would agree about television's benefits if the medium accomplished the readiness and cognitive feats which its proponents claim. Until there is better proof, argument will continue.

## CHAPTER VII

### CONCLUSIONS

The conclusions of this study are not clear-cut. Nor are its suggestions and recommendations. It is evident from the survey of the literature of literacy that little attention has been focused on the relationship between television and literacy. Further any attempts to draw clear conclusions about the cause-effect relationship is difficult. The field observations suggest some consequences of pre-school television viewing. Discussion of the television medium, and the process of reading compares dissimilar processes and suggests that their value in the development of critical thought and judgment differs.

There are four rather basic assumptions which I propose as implicit in this inquiry.

1. That reading and writing comprise two cognitive skills which are a necessary part of the development of critical thought and judgment.
2. That electronic media are here to stay. The social and economic forces which control the media are the society we live in. Electronic media define that society and are inseparable from it.
3. That most attention has been paid to the message of media, not the medium itself.
4. That media is not just a method of education; rather, it is the determiner of education.

If any of these assumptions were fact, the evidence presented herein would be conclusive. Further, if any were easily proved, much confusion and blunder regarding the

relationship between media and education could be avoided. The issues are cloudy; their resolution seems difficult. The best I can do is ask you to accept these observations from the field and test them against your experience--perhaps to explore a wider field of inquiry. It should be evident from the study that a close relationship exists between exposure to television and readiness to read. Further, if the results of the pre-school screening instrument are accurate, there is a negative effect on the readiness for reading that stems from pre-school television viewing.

Children who spend an average of more than two hours each day viewing a television set are deprived of life experiences which may be essential to development in a school setting: the opportunity to interact with their peers and adults to develop sound language skills. Such interaction has traditionally taken the form of observing, listening, responding, and acting. None of these skills can be developed from television viewing alone. The elimination of up to one-half of a child's waking day can seriously restrict the opportunity for the development of social and language skills. Providing a balance to television viewership, then, can improve the potential for success as a reader in school for the pre-school child.

One important result of the study--the one which may stimulate further investigation--is the conclusion that a child's psychomotor development may be impaired by pre-school



television viewing. The conclusion implied by the study is that the psychomotor skills exhibited by a ready school-age child cannot be expected from the child with pre-school television experiences who has not had a balance of physical, social, and language activities.

The notion expressed by many enlightened parents that Sesame Street is a marvelous teacher of pre-schoolers is commendable. Certainly programs like Sesame Street help pre-schoolers to learn numbers and their alphabet. Millions of private and public sector dollars have gone into the development of the Sesame Street format and programming. What most parents do not acknowledge is the fact that Sesame Street also teaches children to watch television. Such education provides the foundation for possible effects on pre-school readiness which are wholly separate from the cognitive benefits of learning the alphabet and numbers on one television channel.

The study does not evaluate the effects of such cognitive pre-school development. It merely acknowledges the direct relationship between pre-school viewership and readiness, a term which has been amply described in the preceeding chapter.

Another possible conclusion of this study is that reading is passe, out of vogue, unnecessary. On the contrary, if the first assumption is to be accepted, reading seems to become a pivotal skill in the higher cognitive development

of children and adults as well. This brings me to the weakest part of my own hypothesis about the value of reading and writing in this society: It would seem that the decline in literacy which has been suggested in the early chapters of the study will help create a future society of zombies--that is, citizens who do not possess the cognitive ability to be responsible for their own lives. Without the tools to analyze and understand the messages of the consumer culture let alone the subtle manipulation of its media, few will even sense that they are being manipulated. Perhaps a conclusion of this study is that such a society is inevitable or that the proper sequence of events will lead us to such a condition.

One thing which educators can do, though, is acknowledge the influence of television upon young children by pointing to the lack of readiness for school which it seems to influence. Educators can demand that commercial broadcasters provide information to parents and children about the effects of television in the pre-school years.

The most damning suggestion of the study is the notion that the potential literacy of small children does not seem to have been addressed in the past. I hope that one result of this study and others like it is a commitment to pre-school children by parents, educators, and media professionals, and, I recommend government intervention to assure it.

The myth of learning disabilities seems to have been

connected to the lack of important pre-school experiences in children. This notion is extremely difficult to prove, especially as the result of a study as subjective as this one. It may, however, provide a stimulus for further research. Without further study, parents and educators must accept the need for sound language, fine motor, gross motor, and social experiences as a balance to the hours which children log in front of a television set. This attitude and practice may help to offset some of the learning dysfunction that is evident in public schools today.

The conclusions of this inquiry imply some solutions to its questions as well as some suggestions for the improvement of literacy. The discussion of the deliterious effect of the medium must be opened by society so that an adequate and fair assessment can be conducted. The wholesale condemnation of television is not a practical solution; it is a reactionary approach which is, certainly impractical, if not impossible. Television is viewed by millions of children and adults each day who are not affected, educationally, in the same way as others are affected. A better suggestion would be the development of an attitude of cautious inquiry to promote conscious use of the medium by people of all ages while striking a careful balance between television experiences and pre-school readiness experiences in young children. In a society which seems to accept television as a part of the culture, an awareness of school

readiness, the perception and growth of young people, and the literacy of all adults would seem paramount.

The group who studied the decline of College Board SAT scores pointed a warning finger at public school systems who have expanded their English curriculum to include a large number of mini-courses. While this kind of diverse offering may be important to meet some of the needs of young people today, that need cannot be adequately met at the expense of continuing to develop literate skills in all children, not just those who are college bound. If what this study presupposes and suggests has merit, then it seems to me that some recommendations are implied:

It seems essential to suggest to parents that they have a great deal of responsibility in the preparation of their children for school. Such responsibility involves close scrutiny of the television medium for pre-schoolers to include the choice of programs, certainly, but more importantly the choice of the medium. It also involves providing a home environment where print has value for the child, an environment where the child is read to each day of his pre-school life, and where the child sees his siblings and parents reading each day. Parents have the responsibility to assure that there is a careful balance between the influence of all media on their children.

Teachers and educators will have to become more vocal about the pivotal position which reading plays in the



cognitive development of all children. They will have to reconcile courses about the value of media awareness in their curriculum. They will have to strike a balance between the influences of each of the media, including reading on each child.

Decision makers and planners will have to make sound decisions about the information explosion in society and the best means of preparing the future citizens to cope with it. Certainly, when the home of the future contains a two-way coaxial cable hook-up as well as a computer terminal, then the value of information as well as its understanding will have to be considered.

The assumptions of this inquiry lead me to conclude that a decline in literacy presumes that the teaching of basic reading and writing skills is more difficult and will continue to become more difficult still. New strategies for the teaching of reading will have to be developed. Suggestions were made by people like Herbert Kohl in Reading: How To, which affirm the value of organic approaches to the teaching of reading rather than canned programs which are produced by textbook manufacturers. (I have a reading teacher at the junior-high level who purchases paperbacks in multiple copies and creates her own supplementary materials by reading the books herself and developing relevant means of assessing comprehension, vocabulary, as well as providing games and activities which increase the child's understanding

of the material.)

The choices of appropriate materials for the teaching of reading must be properly coordinated. Goals for reading habits and the skills of reading, not just the exposure of children to works of literature in alternative forms like comic books, overly illustrated texts, cassette tapes with narrated stories, or other multi-media packages. The uses of printed materials in the classroom as well as an emphasis upon the writing of answers to questions rather than the circling of numbers or the use of true and false and multiple choice tests should be stressed. Lastly, all of the abundance of devices, gadgets, tricks, and work simplifying packages should be closely scrutinized by each teacher. The degree to which each fad interrupts the reading and writing process should be assessed. This is not to say that materials and hardware are not valuable in education. The careful teacher and parent will need to know how to strike a balance between the developmental level of the child and the need to employ clever devices to be successful in educating the child. To date, there has been little success in striking this balance. The amount of work which is saved the teacher and student has seemed to be the overriding consideration.

A third suggestion implied by the study is that the

value of reading must be affirmed to children by example. Educators must take the leadership to tell parents that they must set examples in their own homes. Within the schools, silent reading periods should be set aside for all students and teachers. (In my school we encourage the use of sustained silent reading periods in all subjects. Non-textbook material is encouraged in all classes including Math and Science. A ten minute period at the start of language or English classes is also set aside for children to make entries in diaries which are handed out each day. By controlling the diaries, each child can't forget a diary and they are available each day. Each junior-high age child will have written for 30 hours in that diary for each year spent in the school. While most of the material written is neither seen nor corrected by a teacher, the diaries serve as a springboard for composition work of all types as well as an intensive experience which children wouldn't otherwise get.)

At a time when competency based education seems to be coming into vogue, a final suggestion is made: That each child who is to graduate from a public high school be required to attain prescribed standards of literacy before the issuance of a diploma. This requirement puts as great a responsibility upon educators as it does parents and students. The frightening scores from states where competency testing programs are being administered - in Florida

more than 40% of seniors in one city school system failed to pass a literacy test--tell educators now that their expectations are very high, too high, for many students. It will become the responsibility of educators, then, to develop sound, relevant programs based on an awareness of the issue of literacy in a modern world rather than a "back to the basics" movement.

Teachers, parents, and students who are being carried back into methods and materials of the fifties will find that the relevance of many of the "old-school" approaches won't work with an electronic generation. What will work, though, is the careful presentation of reading as the primary requisite of critical thought and judgment--the revelation that electronic media is patently rhetorical and propagandistic.

I seriously doubt that the condition will improve at all without the recognition by government agencies--the controllers of public education--as well as their commitment to improving awareness and understanding throughout the public sector. The present obsession with employment and employability--the development of job skills, will have to give way to some awareness of problems of literacy and their relation, in part, to problems of employment and employability.

This investigation of the beginnings of literacy, the development of the printing press, the advent of the



electronic age, and a prophesy of the future of literacy has explored relevant issues in the field of public education and commercial broadcasting. It is ironic and is one specific, although unavoidable, limitation of this study that the available information about the growth of literacy during the past 3000 years exists solely in print, and represents information collected, for the most part, during the past one hundred years. Such is the nature of the print medium and the rapid development of literate culture.

To prophesize new directions in the acquisition of knowledge, the development of understanding and critical thought, and the search for meaning without the benefit of a literate context is to break fresh ground. It is the future which must be reconciled. If levels of literacy continue to decline and if written information becomes the product of fewer and fewer individuals, then the chronicle of the future may, of necessity, depend upon new and as yet undiscovered methods and means of recording, disseminating, and understanding information. Without such a process, the meaning of the individual, the role of the institution (the school), and the conditions by which society is governed will be altered radically.

To suggest an end to literacy is one thing. To prophesy the end to knowledge, to ideas, to critical thought and judgment is quite another. Perhaps a closer scrutiny by educators and parents, of the factors which have

influenced changes in the value of print, itself, will provide a clue to the means by which more people in this society will be able to reconcile their existence in the rapidly changing and expanding future.

# A P P E N D I X

## FIELD OBSERVATION TABLE 1

### First Grade age pre-school test results

Number 1976	Sex	Text #1	Test #2	Test #3	Test #4	Tot.	Hrs. TV
1	F	8	10	17	10	45	1.5
2	M	9	9	17	8	43	0
3	M	6	9	12	6	33	1.5
4	M	7	12	13	9	40	4
5	M	8	9	13	10	40	na
6	M	5	8	13	5	31	4
7	F	7	7	12	9	35	2
8	F	6	12	12	8	38	na
9	F	6	6	13	5	30	.5
10	M	8	11	13	5	37	1.5
11	F	7	12	15	8	42	.5
12	M	6	10	12	7	35	2
13	F	7	6	13	9	35	5
14	F	9	7	14	10	40	3.5
15	M	4	12	13	6	35	.5
16	M	7	8	15	6	36	.5
17	F	6	11	15	10	41	1
18	F	9	6	9	7	31	2
A	M					48	0 (Rep. #19)
30	M	6	11	14	9	40	3
31	M	7	11	19	11	48	na
32	M	10	9	17	12	48	1
33	M	6	5	9	9	29	2.5
34	F	6	10	14	7	37	na
35	M	10	8	12	11	41	2
36	F	8	12	17	12	49	.5
37	F	6	10	15	10	41	1
38	M	4	10	20	6	30	3.5
39	F	8	11	17	12	48	3
40	F	7	10	16	12	45	2
1977							
1	M	10	6	14	6	36	
2	F	6	10	16	10	42	
14	F	5	5	5	1	16	3
15	M	6	10	15	9	40	2
16	M	4	8	9	7	28	2.5
17	F	9	7	11	9	36	0
18	F	6	6	15	10	37	3
19	M	8	12	17	12	49	0
20	M	10	10	19	10	49	2

## FIELD OBSERVATION TABLE 1

Number 1977	Sex	Text #1	Test #2	Test #3	Test #4	Tot.	Hrs. TV
21	F	8	12	18	8	46	.5
22	M	4	12	19	10	45	2
23	F	9	7	12	10	38	0
24	F	7	9	19	11	46	.5
25	M	5	7	12	7	31	1
26	M	7	10	17	12	46	3
27	F	7	5	10	10	32	2
A	M	8	6	15	8	37	1.5
B	F	7	8	14	6	35	3
C	M	5	7	14	9	35	3
D	F	8	9	17	9	43	3



## FIELD OBSERVATION TABLE 2

Kindergarten age pre-school test results

Number 1976	Sex	Text #1	Test #2	Test #3	Test #4	Tot.	Hrs. TV
34	M	2	5	8	3	18	1
35	M	5	2	5	2	14	na
36	M	7	8	10	8	33	na
37	F	6	8	13	4	31	1.5
38	M	9	7	18	6	40	2
39	M	3	1	6	2	12	na
40	M	6	6	12	5	29	1
41	F	4	7	14	6	31	na
42	F	4	8	17	6	35	na
43	F	5	8	14	7	34	1.5
44	M	2	4	5	3	14	1
45	M	8	10	18	5	41	na
46	F	3	4	9	4	20	1
47	F	3	8	16	2	29	2
48	F	3	4	13	3	23	2
49	M	1	5	11	3	20	2.5
50	F	5	6	13	17	41	3
51	F	7	7	15	7	36	na
52	M	4	4	17	6	31	6
53	F	4	8	11	3	26	2
54	M	5	8	11	2	26	5
55	M	1	7	15	4	27	5
56	M	7	11	15	6	39	2
57	M	5	8	9	2	24	na
58	F	8	7	15	8	38	2.5
1977							
34	F	6	9	14	3	32	.5
35	M	6	7	14	4	31	na
36	M	7	9	17	5	38	1
37	F	3	3	5	4	15	2.5
38	M	6	12	16	7	41	na
39	M	3	2	6	2	13	1
40	M	7	9	18	3	37	na
41	M	3	7	10	3	23	3
42	F	1	3	7	1	12	na
43	F	9	9	21	6	45	2.5
44	M	7	8	12	5	32	na
45	F	5	2	11	6	24	1
46	M	4	3	12	4	23	na
47	F	4	10	14	2	30	3
48	F	5	11	17	4	37	3

FIELD OBSERVATION TABLE 2

Number 1977	Sex	Test #1	Test #2	Test #3	Test #4	Tot.	Hrs. TV
49	M	1	7	9	5	22	na
50	F	7	2	14	8	31	na
51	M	5	6	10	5	26	.5
52	M	3	8	9	3	23	1
54	F	7	12	19	8	46	1
55	M	5	9	15	5	34	1
56	F	5	8	16	7	36	na
57	M	3	4	10	8	25	2
58	F	7	10	10	5	32	.5
59	M	5	5	13	6	29	1
60	M	4	5	7	4	20	3.5
61	F	6	6	17	5	34	.5
62	F	6	7	9	5	27	2
63	F	4	10	17	5	36	1
64	F	7	7	16	5	35	2
65	M	4	6	7	4	21	2
66	F	6	12	17	5	40	1
67	M	4	9	15	4	32	2
68	F	5	8	19	7	39	na
69	M	6	9	14	8	37	3
70	M	5	10	14	4	33	1.5
71	F	7	8	17	7	39	3
72	M	3	12	14	7	36	na

# FIELD OBSERVATION TABLE #3

Norm Group: Mean raw scores and total scores for specific subtests of the Kent Readiness Test for kindergarten and first grade tests--1976 & 1977

Test No.	1976 - Grade 1 - 1977		1976 - Kindergarten - 1977	
1	7.13 $\pm$ 1.52	7.26 $\pm$ 1.78	5.48 $\pm$ 2.28	5.25 $\pm$ 2.11
2	9.30 $\pm$ 1.91	8.81 $\pm$ 2.51	6.77 $\pm$ 2.13	7.47 $\pm$ 2.73
3	13.73 $\pm$ 2.44	14.30 $\pm$ 3.26	11.91 $\pm$ 3.57	12.28 $\pm$ 3.66
4	8.40 $\pm$ 2.29	9.52 $\pm$ 1.93	4.79 $\pm$ 2.34	5.17 $\pm$ 1.78
Total	38.56 $\pm$ 8.16	39.89 $\pm$ 9.48	28.95 $\pm$ 10.32	30.17 $\pm$ 10.28
	n=29	n=20	n=25	n=38

Combined first grade, combined kindergarten, and combined first grade and kindergarten scores of the specific subtests of the Kent Readiness test, 1976 & 1977

Test No.	Total First Grade	Total Kindergarten	Average
1	7.18 $\pm$ 1.626	5.34 $\pm$ 2.18	6.15 $\pm$ 1.94
2	9.10 $\pm$ 2.16	7.19 $\pm$ 2.49	8.03 $\pm$ 2.35
3	13.96 $\pm$ 2.78	12.13 $\pm$ 3.62	12.93 $\pm$ 3.25
4	8.86 $\pm$ 2.14	5.02 $\pm$ 2.00	6.70 $\pm$ 2.06
Total	39.10 $\pm$ 8.70	29.69 $\pm$ 10.30	33.81 $\pm$ 9.60
	n=49	n=63	n=112

Average scores of respondents to specific subtests  
and total test by hours of television viewing reported.

Test No.	Total Kindergarten	Total First Grade	Average
----------	--------------------	-------------------	---------

1 or less hours of television viewing daily

1	4.75	7.27	5.97
2	6.75	9.53	8.10
3	12.19	14.73	13.42
4	4.69	8.93	6.74
Total	28.50	40.73	34.42

1.5 or less hours of television viewing daily

1	4.32	7.06	5.61
2	7.88	9.59	8.25
3	12.42	15.24	13.75
4	4.74	8.47	6.50
Total	29.16	40.30	34.41

2.5 or more hours of television viewing daily

1	4.62	6.27	5.50
2	7.15	8.20	7.71
3	13.38	12.82	13.14
4	4.69	8.20	6.57
Total	29.85	35.53	32.89

3 or more hours of television viewing daily

1	4.33	6.46	5.59
2	7.67	8.46	8.14
3	13.56	13.54	13.55
4	4.44	8.46	6.82
Total	30.0	36.62	33.91



## THE KENT PRE-SCHOOL READINESS TEST

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Birthdate: \_\_\_\_\_  
 Age: \_\_\_\_\_

Fine Motor Behavior

Uses a pencil with R L \_\_\_\_\_  
 Copies a circle (2,1,0) \_\_\_\_\_  
 3.4/4.1/5.7 Copies a square (2,1,0) \_\_\_\_\_  
 6.0 Copies a diamond (2,1,0) \_\_\_\_\_  
 Draw-a-Man "Draw a whole man, the best  
 one that you can." 3 parts (head -  
 3.3/4.0/5.2 with eyes, nose, mouth - body, arms,  
 or legs) (1 point) \_\_\_\_\_  
 Eye Pursuits ( , ? or -) Eyedness R L  
 vertical \_\_\_\_\_  
 horizontal \_\_\_\_\_  
 diagonal \_\_\_\_\_  
 convergence \_\_\_\_\_  
 Conjugate Vision  
 ( , ? or -)

Gross Motor Behavior

Preferred foot R L \_\_\_\_\_  
 Balance on one foot (arms folded)  
 10 seconds (2 points)  
 2.6/3.2/4.3 5 seconds (1 point) \_\_\_\_\_  
 Standing jump across 15" (2,1,0) \_\_\_\_\_  
 3.5/3.9/5.5 Catch bounced ball (2,1,0) \_\_\_\_\_  
 Catch self-thrown ball, higher than head  
 (2,1,0) \_\_\_\_\_  
 3.9/4.7/6.3 Walk backward heel-to-toe (demo) (2,1,0) \_\_\_\_\_  
 5.0 Skip (2,1,0) \_\_\_\_\_

Perceptual-Motor Behavior

Imitation of Postures: (x,1,0 for each posture)

L index finger  
 between R middle  
 and ringfinger

Touch Fingers:

touch fingers 2,3,4,5 to thumb (2,1,0) \_\_\_\_\_  
 touch fingers 2,4,3,5 to thumb (2,1,0) \_\_\_\_\_

Visual Matching: Card 1 "See this one, put your finger on the one that looks most like it". . ."Find two others that look like this one." (1-5 points) \_\_\_\_\_

Visual Memory: Additional Sheet, folded in half, Set of Cards "Look at this carefully. Soon I'm going to take it away and ask you to find it." Show 5 sec., Delay 5 sec. "Draw a circle around it." (1-4 points) \_\_\_\_\_

Motor Accuracy: Additional Sheet, folded in half "This little girl/boy is going to walk to school on this path. Draw a line where he/she will walk without going off the path." Time \_\_\_\_\_ Errors \_\_\_\_\_ (2,1,0) \_\_\_\_\_

Auditory Memory: Have child turn around in his seat, so that his back is to examiner. "I'm going to clap my hands. I want you to count the number of times that I clap." 3 claps (1 point) 2-2 (2 points) \_\_\_\_\_

Have child stand up beside desk. "I'm going to ask you to do something. Do exactly as I say." Hand child pencil, "Put this pencil above your head, and then behind you." (1 point) "Take two steps forward and one step back," \_\_\_\_\_

### Personal Social Behavior

4.0 No count 3 objects (1 point) \_\_\_\_\_  
5 objects (2 points) \_\_\_\_\_  
Counts 10 objects (2,1,0) \_\_\_\_\_  
Dime and penny: "Which would you rather have? Why? (2,1,0) \_\_\_\_\_  
What would you do if you cut your finger? (2,1,0) \_\_\_\_\_  
How are a plum and a peach alike? How are they the same?" (2,1,0) \_\_\_\_\_

### Letter Recognition: First Graders only

Show me the a.  
Which is the H? (If first initial is H, change to R.)  
What letter is this? (point to L)  
Which one is p? (1-4 points) \_\_\_\_\_

### Observations:

Dominance  
Hand \_\_\_\_\_  
Eye \_\_\_\_\_  
Foot \_\_\_\_\_

Carolyn Kent, M.S. OTR  
April, 1976

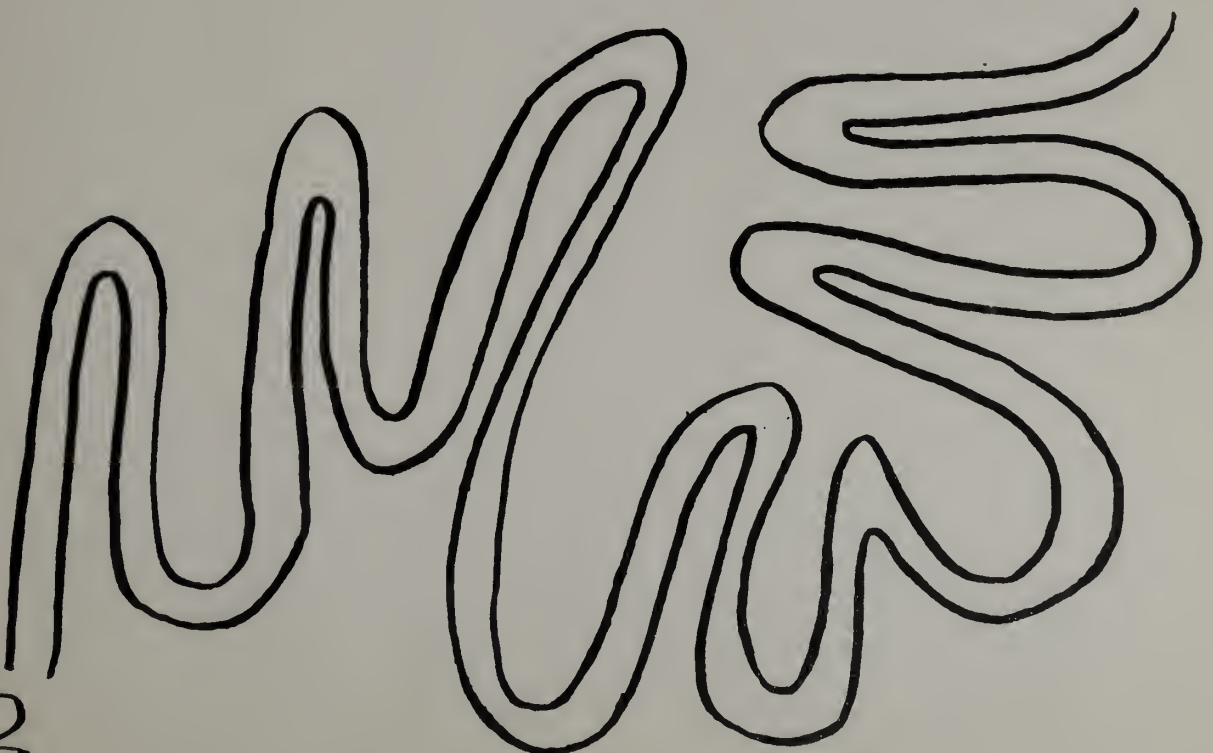
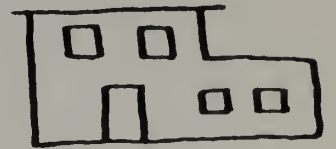
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## PRE-SCHOOL REGISTRATION INTERVIEW WITH PARENT

Child's name \_\_\_\_\_ DOB \_\_\_\_\_

1. How long have you lived at your present address? \_\_\_\_\_
2. If he has been separated at all from one or both parents did he seem different in any way after the separation? \_\_\_\_\_
3. What is the most effective method of disciplining the child? \_\_\_\_\_
4. What situations seem to upset or discourage him? \_\_\_\_\_
5. How does he react when angry or discouraged? \_\_\_\_\_
6. Does he follow directions? \_\_\_\_\_
7. How does he react to new situations and people? \_\_\_\_\_
8. Are his playmates older, younger, or the same age? \_\_\_\_\_
9. How does he generally get along with his siblings? \_\_\_\_\_
10. How does he generally get along with his peers? \_\_\_\_\_
11. Has he ever been away from home? \_\_\_\_\_
12. Does he seem to be more right handed or left handed? \_\_\_\_\_
13. Has he had any difficulty distinguishing right from left? \_\_\_\_\_
14. What activities seem to give him pleasure? \_\_\_\_\_
15. How long can he stay with a task that he enjoys? \_\_\_\_\_
16. What are his nap hours? \_\_\_\_\_
17. What is the approximate amount of time that he watches TV? \_\_\_\_\_
18. Does he enjoy being read to? \_\_\_\_\_
19. What regular tasks are expected of him? \_\_\_\_\_
20. Has he any nervous tendencies? (Bedwetting, excessive lies or fantasy) \_\_\_\_\_
21. Is he fairly good about putting away his toys? \_\_\_\_\_
22. How much help do you give him when he is dressing? \_\_\_\_\_
23. Does he like to use a pencil? \_\_\_\_\_
24. Can he print any letters? \_\_\_\_\_
25. In what respect has his development been slow? \_\_\_\_\_
26. In what respect has his development been fast? \_\_\_\_\_
27. Have any members of your family experienced difficulties with reading and/or spelling? \_\_\_\_\_
28. Is there anything further that you might tell us to know your child better? \_\_\_\_\_

Interviewer \_\_\_\_\_

Interviewee \_\_\_\_\_

Date \_\_\_\_\_

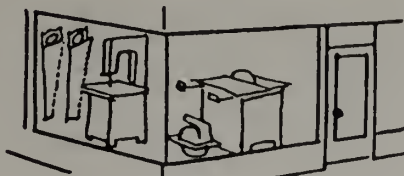


A statement is a sentence that tells. It ends with a period (.).



There is a sale today.

A question is a sentence that asks. It ends with a question mark (?).



Is there a sale today?

Circle tells or asks for each sentence.

- |  |       |      |
|--|-------|------|
| 1. Can you hear that sound?                  | tells | asks |
| 2. It's the fire whistle.                    | tells | asks |
| 3. Are the fire fighters at the station?     | tells | asks |
| 4. Where is the fire?                        | tells | asks |
| 5. People should be more careful.            | tells | asks |
| 6. There are too many fires.                 | tells | asks |
| 7. Do you know what to do in case of a fire? | tells | asks |

## Footnotes

<sup>1</sup>\*the achievement of a system completely based upon the representation of phonemes (the basic units of meaningful sound) was left to the Near Eastern syllabaries, which developed between 1500-1000 B.C., and finally to the introduction of the alphabet proper in Greece. Meanwhile, these incompletely phonetic systems were too clumsy and complicated to foster widespread literacy, if only because the number of signs was very large. . .All of these ancient civilizations, the Sumerian, Egyptian, Hittite, and Chinese, were literate in one sense and their great advances in administration and technology were undoubtedly connected with the invention of a writing system; but when we think of the limitations of their systems of communications as compared with ours, the term 'protoliterate', or even 'oligoliterate' might be more descriptive in suggesting the restrictions of literacy to a relatively small proportion of the population. . .There seems to be no generally accepted usage for societies where there is a fully developed but socially restricted phonetic writing system.<sup>2</sup>

<sup>2</sup>Jack Goody. Literacy in Traditional Societies (London: Cambridge University Press). p. 58.

<sup>3</sup>Leslie A. White. The Evolution of Culture (New York: McGraw Hill, 1959). p. 369.

<sup>4</sup>Idem, The Science of Culture (Toronto: Doubleday Canada Ltd., 1948). p. 22

<sup>5</sup>Marshall McLuhan. The Gutenberg Galaxy (Toronto: The University of Toronto Press, 1962). p. 27.

<sup>6</sup>Reginald Damerell. "Decoding the Television Medium: A Feature Analysis of Cinematic Motion" (Unpublished Manuscript, University of Massachusetts School of Education, 1975). p. 25.

<sup>7</sup>Ibid. p. 19.

<sup>8</sup>Ibid.

<sup>9</sup>Ibid.

<sup>10</sup>Lev Semenovich Vigotsky. Thought and Language (Cambridge, Massachusetts: M.I.T. Press, 1962). p.5.

<sup>11</sup>Ibid. p. 146.

<sup>12</sup>Hans G. Furth. Deafness and Learning: A Psychosocial Approach (California: Wadsworth Publishing Company, 1973). p. 28.

<sup>13</sup>Frank Smith. Understanding Reading (New York: Holt, Rinehart, Winston, 1971). p. 29.

<sup>14</sup>White, Culture. p. 8.

<sup>15</sup>The child's environment--both pre-school and school-age--is a factor which cannot be ignored. James Coleman, in his well-publicized Coleman Report (1972) places a large share of the responsibility for the educability of the child on the parent and home environment. Further, Christopher Jencks, in his book "Inequality" discusses the effect of economic and environmental advantages upon access to school, success in school, and success in life.

<sup>16</sup>The report of the Advisory Panel on the SAT Score Decline states:

We are inclined to believe that probably well-intentioned change has reduced the continuity of study in major fields with consequent effect on the development of verbal and (to a lesser extent) quantitative relations skills, and that too large a proportion of the curriculum changes in recent years has been accompanied by a tendency to avoid precise thinking and the demands it makes upon both students and teachers. (p. 46).

<sup>17</sup>It was language not literature which bonded together the great Roman Empire. "So sensible were the Romans to the influence of language over national manners, that it was their most serious care to extend, with the progress of their arts, the use of the Latin tongue. (Gibbon- p. 63).

<sup>18</sup>Neil Postman. "The Politics of Reading", from "Illiteracy in America: Position Papers". Harvard Educational Review, May 1970. p. 246.

<sup>19</sup>Ibid. p. 247.

<sup>20</sup>Merrill Shiels. "Why Johnny Can't Write". Newsweek, December 8, 1975. p. 58.

<sup>21</sup>Report of the Advisory Panel on the Scholastic Aptitude Test Score Decline, by Willard Wirtz, Chairman (New York: College Entrance Examination Board, 1977). p. 27.

<sup>22</sup>Postman, Politics. pp. 250-251.

<sup>23</sup>James Britton. Language and Learning (Baltimore: Pelican Books, 1970). p. 20.

- <sup>24</sup>Smith. Understanding Reading. p. 48.
- <sup>25</sup>Goody. Literacy. p. 83.
- <sup>26</sup>Ibid. p. 29.
- <sup>27</sup>Ibid.
- <sup>28</sup>Edward Gibbon. Gibbon (New York: Washington Square Press, 1963). p. 63.
- <sup>29</sup>Goody. Literacy. p. 55/
- <sup>30</sup>McLuhan. Gutenberg Galaxy. p. 93.
- <sup>31</sup>Goody. Literacy. pp. 30-31.
- <sup>32</sup>Ibid. p. 62.
- <sup>33</sup>Ibid.
- <sup>34</sup>Ibid.
- <sup>35</sup>Ibid.
- <sup>36</sup>Michael Katz. Class, Bureaucracy, and Schools (New York: Praeger Publishers, 1971). p. 49.
- <sup>37</sup>Ibid. p. 37.
- <sup>38</sup>Ibid. p. 143.
- <sup>39</sup>Norvell Northcut. "Adult Functional Competency". (Report of the Adult Performance Level Project, University of Texas at Austin, March 1975). p. 2.
- <sup>40</sup>Ibid.
- <sup>41</sup>Ibid.
- <sup>42</sup>Ibid.
- <sup>43</sup>The legislature of the State of Florida has enacted legislation which requires a literacy examination before graduation from high school. Many other states in this country are enacting similar legislation. The initial administration of the examination in Jacksonville revealed that 40% of seniors failed the test. An average of 30% of other high school seniors throughout the State failed.

<sup>44</sup>Tests of Functional Adult Literacy: An Evaluation of Currently Available Instruments (Portland Oregon: Northwest Regional Education Laboratory, 1975). p. 20.

<sup>45</sup>Ibid. p. 11.

<sup>46</sup>Ibid. p. 20.

<sup>47</sup>Ibid. p. 11.

<sup>48</sup>Northcut. Competency. p. 3.

<sup>49</sup>Ibid.

<sup>50</sup>Irwin Isenberg. The Drive Against Literacy (New York: H. W. Wilson Co., 1964). p. 37.

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